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24 July 2014

Carmen Santos
PCB Coordinator
Waste Management Division
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Subject: Application for Risk-Based Cleanup of PCB-impacted Site

Sanitary District No. 1 of Marin County – Former Wastewater Treatment Plant

2000 Larkspur Circle, Larkspur, CA

K/J 1365028*00

Dear Ms. Santos:

Kennedy/Jenks Consultants, Inc., on behalf of the Sanitary District No. 1 of Marin County (the District), provides the attached risk-based cleanup application for the Former Wastewater Treatment Plant Site at 2000 Larkspur Circle, Larkspur, California (Site), per the request made by the United States Environmental Protection Agency - Region IX ("Region 9") during our 19 December 2013 meeting. The risk-based cleanup application was prepared in accordance with Code of Federal Regulations Title 40, Chapter 1, Subchapter R, Part 761, Subpart D, Section 761.61 (40 CFR 761.61(c)) and provides the information requested by Region 9 during the December 2013 meeting and subsequent electronic mail transmittals.

In 2008, the District was working with the Department of Toxic Substances Control (DTSC), to obtain a No Further Action determination for the Site so that a private developer could purchase the Site and develop condominiums and a hotel. The DTSC appeared to have no objection to a No Further Action determination but requested that the District engage Region 9 to ensure its compliance. In August 2010, the District provided Region 9 with its Risk- Based Cleanup and Disposal Application. The application demonstrated that the Site had met the cleanup level for low occupancy areas as established by 40 CFR 761. The District has not received a No Further Action determination from Region 9 or any response to the 2010 Risk-Based Cleanup and Disposal Application. Therefore, in December 2013, the District re-engaged Region 9 to complete the process.

The Site is a former wastewater treatment plant owned and operated by the District. The District raised the Site structures in 1998-1999; with subsequent testing showing that the demolished concrete structures were coated with paint containing PCBs. Most, but not all, of the soil

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containing PCB-laden concrete particles has been removed from the Site. A thorough characterization of the subsurface environment was conducted by the District and their environmental consultants between 2006 and 2008. The results of the investigations demonstrate that remaining contaminants poses no significant risk to public health or the environment.

The Site is currently vacant and the District has not determined its future use. However, in the interim, the District intends to use the site as overflow parking for the Golden Gate Bridge and Highway Transportation District's Larkspur Ferry Terminal, a critical regional transportation component. As such, the interim use of the Site complies with the "low occupancy" definition under 40 CFR 761. When the District determines the future use for the Site, we will notify Region 9 and work with the appropriate agencies, implementing the appropriate measures to ensure compliance with applicable laws and regulations.

The District requests that Region 9 issue a No Further Action determination for the proposed interim use of the Site, as described in the attached Risk-Based Cleanup and Disposal Application. Please provide your determination by August 22, 2014. If you require additional information for your assessment, please contact me, or Mr. Greg Norby – General Manager of Sanitary District No. 1 of Marin County. Your prompt attention to this matter is appreciated.

Respectfully,

KENNEDY/JENKS CONSULTANTS

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Todd Miller, CHG Principal Geologist

Enclosure - Application for Risk-Based Cleanup of PCB-impacted Site

c: Steven Arman, United States Environmental Protection Agency Alvin Greenberg, Risk Science Associates
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24 July 2014

To: Greg Norby – Ross Valley Sanitary District

From: Todd Miller – Kennedy/Jenks Consultants

Dr. Alvin Greenberg – Risk Science Associates

Subject: Application for Risk-Based Cleanup of PCB-impacted Site

2000 Larkspur Landing Circle, Larkspur, California

K/J 1365028*00

1. Introduction

The Ross Valley Sanitary District (RVSD) owned and operated the Larkspur Wastewater Treatment Plant (LWTP), located at 2000 Larkspur Landing Circle in Larkspur, California (Figure 1), between 1948 and 1985. The LWTP facility was no longer needed for local wastewater treatment, following completion of the much larger, centralized wastewater treatment plant by the Central Marin Sanitation Agency in 1985. The RVSD began planning for removal of the treatment plant and redevelopment of the approximately 10.5 acre parcel in 1995. The proposed redevelopment included a multi-family residential development (townhomes and condominiums), a hotel and associated parking areas, and an administration/operations headquarters building for the RVSD. The grading plan for the overall development included filling in excavations created during building demolition, and importing soils to complete the site grading. In 1998 and 1999, the RVSD demolished the on-site concrete structures and associated piping. The crushed concrete material was mixed with on-site soils and used as a non-expansive engineered fill to backfill the excavations left by the demolition process. Subsequent to backfilling with the engineered fill, imported fill was brought onto the site and placed over the crushed concrete material. Testing of this imported fill after grading revealed low concentrations of TPH as diesel fuel (TPH-D), TPH as motor oil (TPH-Mo), and polychlorinated biphenyls (PCBs). Site remediation activities were conducted in 2005 and 2006 and in October 2006, the California Department of Toxic Substances Control (DTSC) issued a "No Further Action" letter for the site.

Subsequent investigations conducted by the property developer revealed additional PCB-impacted soils at depth beneath the site. Investigations conducted in 2007 and 2008 revealed that the engineered fill (soil mixed with crushed concrete) used to backfill the excavations created during site demolition contained non-hazardous concentrations of PCBs (less than50 milligrams per kilogram [mg/kg]). Laboratory testing demonstrated that although present at elevated concentrations (less than 50 mg/kg), the PCBs were insoluble and not mobile or bio-available. Groundwater and surface water samples collected from open excavations did not contain detectable concentrations of PCBs, at or above the method reporting limit of 0.5 micrograms per liter (µg/L). In 2012, RVSD graded the site to better manage stormwater by leveling clean soils that were stockpiled on-site. No other activities have been conducted on-site.

2. Purpose

The site is currently used as an operations base for RVSD, and includes two modular buildings and an area for sewer maintenance and operations equipment, vehicles, and materials staging. RVSD is working to identify future beneficial uses for the approximately 10.5-acre site. RVSD is submitting this application for a risk-based closure of the site under the Toxic Substances Control Act (Code of

Federal Regulations, Title 40, Chapter I, Subchapter R, Part 761, Subpart D, 761.61(c) [40 CFR 761.61(c)]), based on future land uses to include high-density (e.g., townhomes, condominiums) residential and commercial (e.g., retail, hotel) development. These future land uses are based on the current zoning and approved uses by the City of Larkspur. However, the RVSD does not expect to seek long term development of the property for several years and in the interim is seeking approval from the United States Environmental Protection Agency (USEPA) to use the site for public parking, including overflow parking for the nearby Larkspur Ferry Terminal, operated by the Golden Gate Bridge Highway and Transportation District (GGBHTD). The RVSD operations base currently occupying a portion of the site would remain during this interim period of public parking use.

3. Background and Site Setting

The former LWTP site was purchased by RVSD in the 1940's. The LWTP was constructed in 1948 and consisted of a Control Room building and connected Sludge Digester, Clarifiers#1 and #2, Biofilters #1 and #2, and the Sludge Holding Pit. By the early 1960's, Clarifier #3 and Biofilter #3 were added to the Plant. In the mid-1970's, a Chlorine Contact Chamber and microscreens were added to the southeast portion of the Site. The LWTP was decommissioned in 1985 when wastewater treatment for the Ross Valley service area was shifted to the Central Marin Sanitation Agency (CMSA) Wastewater Treatment Plant. A Site Plan of the former LWTP is included as Figure 2.

Demolition of the former LWTP facilities was conducted in 1998 and 1999. The treatment plant structures were primarily composed of reinforced concrete and concrete block, and steel. The exteriors of the aboveground portions of the Treatment Plant were painted with a cream to light green colored industrial paint. The LWTP structures were demolished and the concrete was crushed on-site for use as backfill material. Records indicate that the thin veneer of paint that had been applied to the exterior surfaces did not chip or flake off and was not practical to remove from the concrete. Some of the concrete pipes removed during the demolition process were also crushed and utilized as fill material.

The crushed concrete was tested for the presence of total and soluble lead, due to the paint that existed on the structures prior to demolition. Lead was known at the time to be a common constituent of industrial paint and testing of building materials and paint for lead was a standard practice. Testing of two crushed samples revealed low levels of total lead (42 milligrams per kilogram [mg/kg] in both samples) and soluble lead at 0.8 milligrams per liter (mg/L) and less than 0.50 mg/L (non-detectable at the analytical method reporting limit of 0.5 mg/L). The reported total and soluble lead concentrations were below applicable threshold concentrations and not considered to represent an adverse risk to human health or the environment for the intended future site use (residential and commercial mixed use). At the time (1998-1999) it was not realized that the paint on the concrete surfaces contained PCBs. The presence of PCBs in paint was a poorly publicized environmental concern, and testing for PCBs in paint on concrete was not a standard practice at the time. Activities conducted during site demolition were reported to the California Department of Toxic Substances Control (DTSC) by Questa Engineering in 2000.

The crushed concrete material was mixed with site soils and used as backfill in the various excavation areas created during the demolition process. Some of the crushed concrete was mixed

with soils at the bottoms of deep excavations to stabilize wet, clayey soils, but a majority of the crushed concrete/soil mixture was used to backfill pits created by the demolition of the three clarifiers, the Sludge Digester with attached Control Room, and the Sludge Holding Pond. These areas had been excavated to relatively deep depths to remove the concrete tanks and structures. A thin layer of crushed concrete/soil mixture (approximately one foot thick) was also placed near surface grade in the areas of the three biofilters, and in other low lying areas of the site. Figure 3 illustrates the approximate extent of the crushed concrete and mixed fill soil in cross sections through the various site locations.

4. Historical Site Investigation and Remediation Activities

The following summarizes the investigation and remediation activities conduced at the site between 1995 and 2008. Detailed information of the individual investigations and/or remedial actions can be found in the following reports:

- 1996 Questa Investigation (Questa 1996)
- 2000 Questa Report, June 12 (Questa 2000)
- 2004 Questa Phase II Investigation (Questa 2004b)
- 2006 EKI, Report documenting removal of contaminated fill (EKI 2006)
- 2006 NFA from DTSC
- 2007/2008 Questa Phase II Investigation (Questa 2008)

A Phase I Environmental Site Assessment and a Phase II Subsurface Investigation of accessible site locations were conducted between 1995 and 1996, and reported by Questa Engineering Corporation (Questa) in September 1996. Information from the Phase I and Phase II investigations was used to determine which areas of the site should be investigated further in conjunction with demolition of site facilities.

In 1998, RVSD contracted with Nute Engineering to prepare Demolition and Restoration Plans for the LWTP. The Plans called for the crushing of the concrete plant facilities on site and re-using the material as engineered fill. Phase I of the site demolition included removal of the Chlorine Contact Chamber, Sludge Thickener, and the eastern parking lot. Concrete slabs were temporarily stored in the Sludge Holding Pond area, and later crushed for re-use during Phase II of the demolition. Phase I demolition was accomplished between January and May of 1999.

Phase II demolition was conducted between July and September 1999. The structures demolished during Phase II included Biofilters No.1, 2 and 3; Clarifiers No.1, 2 and 3; and the Sludge Digester with attached Control Room. The results of samples collected during demolition were presented in a 12 June 2000 Questa report.

In 2004, a characterization of the imported fill was conducted by Questa to determine if any chemicals of potential concern were present in the imported soils. Results were presented in the June 2004 report prepared by Questa. The investigation included collecting samples using hand augers and electric augers. Twenty-six boreholes to depths of 2.5 to 3.0 feet below the ground surface were advanced and 88 soil samples were collected and composited for testing. Laboratory results indicated several chemicals of potential concern in the import fill, including TPH-D, TPH-Mo,

and PCBs. These contaminants were found to occur in four specific site areas that had received imported fill.

Excavation and removal of contaminated fill containing constituents of concern exceeding the site-specific remedial goals approved by the DTSC (TPH-D at 100 mg/kg, TPH-Mo at 500 mg/kg and PCBs at 0.22 mg/kg [total PCBs]) from the four sub-sites was completed between September and November 2005. Results of confirmation sampling indicated that the residual contaminant concentrations were reduced in the four areas to levels below the site cleanup goals. A fifth sub-site was identified during completion of this work, and removal of soil exceeding the cleanup goals was achieved between February and March 2006. Erler & Kalinowski, Inc. (EKI) submitted a report in 2006 to the DTSC describing the removal actions, and on October 20, 2006, the DTSC issued a no further action letter for the site.

In November 2007, TRC/Lowney conducted an additional investigation of fill quality for John Laing Homes. TRC/Lowney's report, dated December 4, 2006, indicated that several additional areas of the imported fill contained TPH-D, TPH-Mo, and PCBs in excess of the site cleanup goals. A follow up investigation was performed by Questa and additional excavation work removed the contaminated imported fill from six small areas. Sampling conducted in 2007, following the additional remediation work, showed that some of the engineered fill (soil mixed with crushed concrete) located below the imported fill (i.e., below 3 feet bgs) contained detectable concentrations of total PCBs, especially in the areas of the former Clarifiers, Sludge Digester and Control Room Building, where thick sections of fill were placed following demolition of LWTP facilities. Low levels of total PCBs were also found to be prevalent in the location of the concrete crusher but at much shallower depths.

The results from the 2007 sampling event, showing detectable concentrations of PCBs at depths below three feet bgs, indicated that further investigation was needed. Additional soil and groundwater sampling was conducted in November 2007 and February 2008, to evaluate the extent of, and PCB concentrations in, the engineered fill material (crushed concrete and soil mixture) placed in the former wastewater treatment plant structure areas following their demolition. In total, the investigation included digging 46 test pits and advancing 14 soil borings. Test pits and boreholes were sited to more fully evaluate the presence of PCBs within the engineered fill material.

Test pits depths ranged from 5 to 10 feet below ground surface (bgs). Soil borings were completed using a Geoprobe® direct push drill rig to depths ranging from 15 to 25 feet bgs. Soil samples were collected from the test pits into pre-cleaned glass jars. Soil samples collected during drilling were stored in the acetate liner used to line the drill core tube. Groundwater samples were collected from nine open boreholes using clean disposable bailers. Sample locations are illustrated on Figure 4 and soil and groundwater results are presented in Tables 1 and 2, respectively. Laboratory reports are included as Attachment A.

Field records confirmed that the engineered fill is present at varying thicknesses within the former LWTP structure backfill areas. Furthermore, laboratory results demonstrate that these materials contain total PCBs at concentrations varying from trace levels (0.01 mg/kg) to moderate concentrations (up to 47 mg/kg). Within the Clarifier No. 1 area, the fill materials contained PCBs at dry weight concentrations generally ranging from non-detectable to 4.3 mg/kg, with a single outlier sample result at 53 mg/kg (QTP-CL#1-1@8'), which likely was due to the presence of paint chips concentrated in the sample tested by the laboratory. Based on a review of site photographs, the

area around former Biofilter No. 1, was used as the concrete crushing area. A soil sample collected from this area contains the second highest detected PCB concentration (47 mg/kg).

Groundwater samples were filtered through a 0.45-micrometer filter by the laboratory prior to analysis. Laboratory results indicated that PCBs concentrations in the nine samples were non-detect, at a method reporting limits of 0.5 μ g/L for Aroclor 1254 and Aroclor 1260, the two Aroclors detected in soil samples at the site.

4.1 Surface Sediment Samples

A grass lined swale located along the eastern and southern portions of the former plant site collects surface water and transmits it to a storm drain collection system at the site boundary adjacent to Sir Francis Drake Boulevard. Samples of the sediment were collected from the former plant area and tested for the presence of total PCBs. Results of the testing indicated trace levels of total PCBs at or below 0.10 mg/kg wet weight (0.125 mg/kg dry weight, assuming 25% moisture content) in five of the seven samples collected. Sample locations are shown in Figure 4 and results are included in Table 3. Two samples contained total PCBs at concentrations of 0.8 mg/kg and 1.1 mg/kg by wet weight. These two samples were located within the backfill of Clarifier #3, which contains crushed concrete materials. Sediment control measures are in place in the stormwater runoff area, in accordance with the State Water Resources Control Board approved Stormwater Pollution Prevention Plan (SWPPP). The sediment controls include straw wattles, sand bag sediment dams, rock riprap sediment structures, and other sediment removal measures for the stormwater prior to leaving the project site.

4.2 Surface Water and Groundwater Samples

During the soil removal activities, groundwater seeped into several excavation areas, and stormwater flowed into several pits. Water samples were collected on several occasions using clean Teflon bailers and were not filtered prior to analysis so that any PCBs attached to fine particulate matter or dissolved in the water would be detected, if present. Samples were analyzed for PCBs following USEPA Method 8082. Review of the laboratory results showed no detectable concentrations of PCBs in the samples collected. Results of testing are summarized in Table 3.

4.3 Solubility Testing of Soil Samples

Samples collected from the excavation in the former location of the Clarifier No. 2, Sludge Digester, and Control Room were re-sampled and tested for the presence of soluble PCBs using the Waste Extraction Test (WET) leachate method (USEPA 3520C). PCB concentrations were determined in accordance with USEPA 8082. Review of the results revealed no detectable PCBs in the WET leachate samples. The same soils, or samples of adjacent soils were also acid digest extracted (EPA 3550B) and analyzed for PCBs (USPEA Method 8082). Total PCB concentrations in the acid digest extracted samples ranged from 0.175 mg/kg to 22.4 mg/kg by wet weight (0.198 to 25.3 mg/kg by dry weight, assuming 13% moisture content). Comparison of the results from the two samples sets indicates that the PCBs in the paint samples are non-soluble and not bioavailable. A summary of these data is presented in Table 4, and locations of the samples are shown in Figure 5.

5. Identification of the PCB Source

Literature review, field observations and additional crushed concrete material sampling was completed to identify the probable source of the low levels of total PCBs. During literature review, it was found that PCBs have been used in various industrial applications in addition to their common usage in transformer oils (http://www.epa.gov/pcb/). Most notably for the project site are references to PCBs being present in industrial paints at other sites in the United States and as pipe coatings in water and wastewater applications. A plasticizer was reportedly manufactured by Monsanto Corporation that included concentrations of PCBs between 5 and 14 percent. This plasticizer was sold to independent paint manufacturers and suppliers who added the plasticizer to paint to create paint with a smooth glossy durable finish. This was reportedly used predominantly in industrial paints and other products (Environmental Protection, April 2001, Vol. 12, No. 4, page 58).

Samples collected from several excavation areas revealed the presence of crushed concrete with painted surfaces and the presence of coated or glazed crushed ceramic pipes. Laboratory analysis of these materials (prepared in accordance with USEPA 3550B and tested following USEPA 8082) revealed concentrations of total PCBs in acid-digested paint chips scraped from concrete at a concentration of 48,000 mg/kg; and crushed painted concrete samples at 0.75 mg/kg. Samples from pipe coatings that were acid digested had trace (0.078 mg/kg) to low (4.5 mg/kg) concentrations of total PCBs.

6. Current Site Use - District Operations Base

The current use is as a District vehicle parking area, Supervisory Control and Data Acquisition (SCADA) computer monitor/control building (and building expansion to the adjacent sanitary sewer pump station called "PS 10 Landing B"), sanitary sewer pipeline and manhole storage area (for new spare parts that are used on an as-needed basis), and incidental employee check-in (to the building). The southernmost approximate two acres are used for this area. The site is completely fenced off from the public with a cyclone chain-link fence of approximately 8-ft in height, and has a locked swing-gate at the main entrance. Lighting is provided by the SCADA Building / PS 10 Building Expansion, which serves as the employee check-in location. Employees meet here for an hour in the morning, and an hour at the end of the day. The SCADA Building / PS 10 Building Expansion is a pre-fabricated building that will eventually be replaced by a District Headquarters/Corporation Yard building.

In May 2012 the RVSD re-graded the site to minimize erosion and clean-up its appearance, spreading out clean soil piles that were brought on-site by the previous property developer (Campus-St. James) in 2007/2008. The RVSD also installed a stormwater conveyance system and erosion control measures on-site; and maintains best management practices to capture and control runoff, including a CalTrans-type grass mix on the sloped and terraced surfaces to prevent stormwater run-on and run-off from eroding the soils

Figures 6 and 7 are topographic maps illustrating site-related grades and features prior to and after grading. Figure 8 represents a cut/fill map that shows the relative change in site elevations, based on the grading activities. The re-grading activities did not remove any soil from the property, and did not re-distribute the PCB-impacted soils. However, the sample depths (as measured from ground

surface) recorded during previous site investigations have changed because of the re-grading activities. Revised sample depths have been calculated based on elevation changes illustrated on the cut/fill map and are included in the summary tables.

7. Chemicals of Concern

Site soils and imported fill materials were tested for the presence of total petroleum hydrocarbons and associated volatile organic compounds (VOCs), lead and PCBs, based on the known historical industrial activities conducted at the site. Laboratory results of samples collected in 2004 and 2005 identified TPH-D, TPH-Mo and PCBs as chemicals of concern in the imported fill material and engineered fill used on-site. In 2006, RVSD excavated impacted soils containing those compounds at concentrations that exceeded the site-specific remedial goals. The DTSC issued a no further action letter for the site in October 2006. However, in 2007, an investigation conducted by the property developer identified additional areas of the site where elevated concentrations of PCBs existed in the engineered fill. No other compounds are known or suspected to be present at the site at concentrations that would represent a human health or an environmental concern.

8. Nature and Extent of PCB Contamination

Site characterization activities have identified residual PCBs in the paint adhered to the crushed concrete as the constituents of concern for the site. As such, PCBs are expected to occur at depths greater than 4 feet bgs, at locations where engineered fill was previously used on-site. This includes areas where former LWTP structures were removed and excavations were filled, as well as the area used for crushing the concrete during site demolition activities (see Figure 1).

PCBs detected in on-site samples include Aroclor 1254 and Aroclor 1260. Detectable concentrations of total PCBs range from 0.01 mg/kg to 53 mg/kg, with only one sample exceeding the 50 mg/kg TSCA threshold and one additional sample exceeding the 25 mg/kg threshold for low occupancy use (40 CFR 761.61 (a)(4)(i)(B)(1)). The two samples are QTP-08-17 (47 mg/kg @ 5.9 feet bgs, and QTP-CL#1-1 (53 mg/kg at 11 feet bgs). Sample locations are illustrated on Figure 9. Samples with PCB concentrations exceeding the USEPA screening level concentration of 0.22 mg/kg for residential use are located throughout the site, at depths ranging from 0.7 feet bgs to 16 feet bgs.

Phase I Site Development – Interim Parking for Regional Public Transportation

The Larkspur Landing area has developed into a key regional transportation hub for Marin County at the intersection of the 101 and 580 freeways, Sir Francis Drake Blvd (the primary east-west arterial for central Marin), and the GGBHTD's Larkspur Ferry Terminal. The Ferry service is operating at maximum capacity during peak commute hours, and is projected to need further expansion to meet continued growth in demand for public transportation from central Marin to San Francisco. In addition, the Sonoma Marin Regional Transit (SMART) Train project, sponsored by the Marin Transit Authority (MTA) and the Regional Transit Connection (RTC), is scheduled for construction in the next few years, with the SMART Train's southern terminus station to be located adjacent to the Larkspur Ferry Terminal. The area has also experienced a resurgence in its retail development. The combined impact of these factors is that public parking has become a significant constraint, with the

Ferry complex and adjacent commercial and mixed use parking areas experiencing demands far above current capacity on a daily basis.

To help meet the parking needs of the regional transportation hub and Larkspur Landing area, the community is in urgent need of additional parking for alternative transportation. The RVSD is interested in expediting the approval process for interim use of a portion of the site for public parking.

As presented in Section 3 (Background and Site Setting) and Section 6 (Nature and Extent of PCB Contamination), the maximum PCB concentration in the upper 3 feet of soils is 22.4 mg/kg and the 95 UCL for PCBs in the upper 3 feet of soils is 1.5 mg/kg (Attachment B), which are less than the USEPA standard of 25 mg/kg for low-occupancy site use (40 CFR 761.61 (a)(4)(i)(B)(1)). Historical sample results only identified two distinct samples with total PCB concentrations exceeding the 25 mg/kg standard, and both are located below 3 feet bgs. Because the surface of the site has been graded and at least one foot of clean fill covers the areas of the site to be used for parking, the exposure pathway to nearby residents and the general public accessing the site on a short-term basis is incomplete. Therefore, the additional risk to these two populations from the site contaminants is minimal and no further remediation or site improvements are needed for the proposed interim use.

The RVSD anticipates developing approximately 5 acres as temporary parking (Figure 10). The site would be segregated into three general areas; continued operations staging use by RVSD, temporary parking use by GGBHTD, and vacant/unused area. The temporary parking will be on two separate graded surfaces, conforming to the current land configuration. The RVSD will install a suitable surface over the entire parking area, based on public parking use service requirements and City permitting requirements. Interim parking surfacing may consist of compact gravel or a variety of lower grade (less permanent) asphaltic surfaces based on service needs such as avoiding dust, walking surface suitability for the public, and all-weather use by public vehicles. The grade will be relatively flat, with appropriate slope for stormwater drainage.

Because the PCBs in the subsurface are contained in the paints adhered to the crushed concrete, any downward migration of surface water seeping through the parking area surface is not expected to cause contaminant migration / groundwater impacts (as confirmed by groundwater samples collected on-site in 2008). Parking areas will be bermed to keep stormwater from running off into uncontrolled areas of the site. Best Management Practices will be used to capture site sediments in the drainage channel on the east side of the site and the stormwater basin at the south end of the site, in accordance with current State and federal regulations. A fence will be installed around the undeveloped portions of the site to control access.

As part of the approval for interim use as a commuter parking lot, the RVSD will conduct quarterly inspections of the facility to ensure that the existing cover remains intact and competent. The RVSD will repair eroded areas of the surface cover in a timely manner, and keep written records of the inspections and repairs. The written logs will be kept in the RVSD's office and will be made available for review upon request.

10. Potential Health Risk Evaluation for Proposed Interim Use

A site-specific human health risk assessment (HRA) was prepared in 2008 and included a detailed examination of the exposure pathways and the nature of the PCBs in the soil. Several unique site-specific circumstances were considered when preparing that HRA. First, the PCB concentrations in soil, as reported by the laboratory, are not the result of PCB-containing fluid spilled onto the ground; rather, they originate from two sources, as demonstrated by the in-depth investigations conducted on-site between 2004 and 2008. The primary source of the PCBs is the paint-binder matrix that was applied to concrete pipes and structures at the LWTP. The painted concrete structures were demolished on-site and the concrete was crushed and used to backfill the excavations and low-lying areas. The secondary source is the PCB-impacted soils that were brought onto the site by the former developer, Campus-St. James.

Second, soil samples submitted to the laboratory for analysis using the Waste Extraction Test (WET) procedure showed non-detectable concentrations of PCBs. It was only when the soil samples underwent acid digestion that PCBs were found at very low levels (average concentration in soil is 0.9 ppm and the 95 UCL = 1.9 ppm). These results indicate that the PCBs are bound in the paint adhered to the surface of the concrete particles, and are, therefore, not available to the environment or for human exposure. Given that all of the concrete-bound PCB samples are now located at least 5 feet below the ground surface, PCB-impacted soils imported onto the site by Campus-St. James reside below several feet of clean fill, and the results of the laboratory analyses indicate that the PCBs are not bioavailable, the dermal exposure pathway – and perhaps even the ingestion pathway – is incomplete and should not be included in the HRA, for the proposed use of the site as a temporary parking facility.

In the 2008 HRA, the PCB cancer risk was calculated for the commercial/industrial receptor for the ingestion pathway and the inhalation of re-suspended dusts, another potential pathway that is most likely incomplete. The calculated risk was 6.7E-07 for the on-site commercial/industrial receptor and the chronic non-cancer hazard index was 0.046. Both of these values are far below the level of regulatory significance and indicate that no significant risk exists to on-site workers. If the site were used as a parking lot, the exposure frequency and duration for an individual parking a car at the site would be far less than that for an on-site worker who was assumed to spend an entire workday at the site. Therefore, the risks to the public using the site as a parking lot based on current conditions, with no additional cover or cap, would be insignificant.

The HRA used very conservative (health-protective) assumptions when calculating risk including the assumption that 100% of the soils ingested by an on-site worker would come from the site, 100% of the soil would contain PCBs, and that 100% of the PCBs found in the soil would be bioavailable, that is, would be absorbed into the body upon ingestion. The assumption of 100% absorption ignores the fact that at least a portion of the PCBs would not be released from the painted concrete particles by digestive fluids (including stomach acid) and thus would not be available for absorption. Based on these conservative assumptions, actual risks from PCBs are likely less than those calculated in the HRA.

Risk assessments involving public or worker exposure to PCBs usually involve liquid PCBs spilled on soil or in water that are available for human exposure and are bioavailable when exposure occurs. It is doubtful that all the PCBs bound-up in a paint matrix that were not released in the WET

procedure, which involves treatment with citric acid for 48 hours, would be bioavailable if ingested and, therefore, the risk assessment likely over-estimates exposure, hazard, and risk. This contention is supported by a recent risk assessment conducted by the U.S. EPA that used a factor of 30% for absorption of PCBs in soil when assessing exposure by the ingestion pathway (U.S Environmental Protection Agency (EPA). 2008. "Revised Final Human Health Baseline Risk Assessment report for Anniston PCB site Operable Unit 3". EPA contract 68-S7-03-04. January).

Furthermore, the proposed parking area will be covered by at least 1 foot of clean compacted gravel, or comparable material that will withstand vehicular traffic and control dust. Therefore, future workers or parkers will not encounter the buried concrete particles coated with PCB-paint, and any dust generated from cars driving across the constructed surface will not contain PCB-laden particles, thus eliminating the potential exposure pathways, further reducing the potential risk to human health and the environment.

Additionally, stormwater and groundwater samples collected during historical investigations on the site demonstrate that stormwater and shallow groundwater have not been impacted by the presence of the PCB-laden crushed concrete buried on-site, even though a surface cap has not existed since the demolition of the LWTP. As such, stormwater controls and best management practices will be engineered to meet the requirements of California's Industrial Stormwater General Permit.

Based on the above evidence, the PCBs on the LWTP site do not pose a significant risk to workers, public parkers, or the environment and a cap or cover is not warranted to protect human health or the environment for the proposed interim use.

11. Phase II Site Development – Residential and Commercial Mixed-use Development

The RVSD is not currently pursuing long term development of the site. However, based on current zoning and community land use needs, future use will likely be similar to plans developed for the site in 2008, which included high-density residential (townhouses, condominiums) and commercial (retail, hotel). To support these future land uses, the RVSD will be pursuing un-restricted closure of the site, following a risk-based approach that will be protective of human health and the environment. The RVSD will present a risk-based remedial goal for unrestricted use in the second phase of this Application.

Tables

Table 1 – November 2007 and February 2008 Soil Sample Results Summary

Table 2 – November 2007 and February 2008 Groundwater Sample Results Summary

Table 3 – Surface Sediment Sample Results Summary

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Figures

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Figure 3 – Cross-sections Illustrating Extent of Post-demolition Fill

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Figure 10 – Proposed Phase I Development Parking Area

Attachments

Attachment A – Laboratory Reports for Applicable Confirmation Soil Samples Attachment B – 95-percent Upper Confidence Limit Calculations

References

California Department of Toxic Substances Control, 2006, No Further Action Letter, October 20.

Erler & Kalinowski, Inc 2006, Document Review of Environmental Conditions, Larkspur, CA, July,

Questa Engineering Corporation (Questa), 1996, Environmental Site Assessment/ Subsurface Investigation Abandoned Sewage Treatment Plant, Lake Spur, CA. September.

Questa, 2000, Hazardous Materials Investigation Report, Demolished Wastewater Treatment Plant, 2000 Larkspur Landing Circle, Larkspur, CA, 12 June.

Questa, 2004a, Sampling and Testing of Soil, Larkspur Landing Circle, June 23.

Questa, 2004b, Phase II Soil Investigation Report, 2000 Larkspur Landing Circle, Larkspur, CA, 30 June.

Questa, 2006a, Subsurface Investigation Report, Larkspur Landing Circle, July 26.

Questa, 2006b, Results of Removal of Contaminated Soil and Confirmation Soil Sampling, 2000 Larkspur Landing Circle, Larkspur, CA, May.

2006 TRC/Lowney Investigation

Questa, 2006, Subsurface Investigation Report, 2000 Larkspur Landing Circle, Larkspur, CA, July.

Questa, 2008, Site Investigation of Crushed Concrete Materials and Associated Fill Soils, Former Larkspur Wastewater Treatment Plant Site, 2000 Larkspur Landing Circle, Larkspur, California, March.

Tables

- Table 1 November 2007 and February 2008 Soil Sample Results Summary
- Table 2 November 2007 and February 2008 Groundwater Sample Results Summary
- Table 3 Surface Sediment Sample Results Summary
- Table 4 Solubility Testing Sample Results Summary

Table 1: November 2007 and February 2008 Soil Sample Results Summary

		Revised			A	roclor				PCBs
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	(total) ^(b)
AND DEPTH	(ft bgs)	(ft bgs)		l.	Co	ncentrati	on (mg/kg	<u>;</u>)		I.
Excavation Areas D & E 2006										
D2-W@1.25'	1.25	5.25	ND ^(c)	ND	ND	ND	ND	ND	ND	ND
D7-S@1.25'	1.25		ND	ND	ND	ND	ND	ND	0.15	0.15
D9-N@1.25'	1.25		ND	ND	ND	ND	ND	ND	ND	ND
D11-B@5.5'	5.5		ND	ND	ND	ND	ND	ND	ND	ND
D12-B@5.5'	5.5		ND	ND	ND	ND	ND	ND	0.12	0.12
D14-E@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
D15-E@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
D-16-(B)@6'	6.0		ND	ND	ND	ND	ND	ND	ND	ND
D-17-B@6'	6.0		ND	ND	ND	ND	ND	ND	ND	ND
D-19-NE@6'	6.0		ND	ND	ND	ND	ND	ND	0.15	0.15
D-20-B@5.5'	5.5		ND	ND	ND	ND	ND	ND	0.13	0.13
D-22-B@5.5'	5.5		ND	ND	ND	ND	ND	ND	0.057	0.057
D23-E@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
D24-B@5.5'	5.5		ND	ND	ND	ND	ND	ND	ND	ND
D25-N@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
E6-B@6.5'	6.5		ND	ND	ND	ND	ND	ND	ND	ND
E7-S@3'	3.0		ND	ND	ND	ND	ND	ND	0.049	0.049
E8-W@3'	3.0		ND	ND	ND	ND	ND	ND	0.082	0.082
E10-N@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND
E11-B(S)@3.75'	3.75		ND	ND	ND	ND	ND	ND	0.045	0.045
E12-SE@1'	1.0		ND	ND	ND	ND	ND	ND	0.01	0.01
E14-E@3'	3.0		ND	ND	ND	ND	ND	ND	0.14	
E17-B(NE)@9.0'	9.0		ND	ND	ND	ND	ND	ND	ND	ND
Excavation areas F, I, J, & K 200										·
F1N@1.5'	1.5	1.5	ND	ND	ND	ND	ND	0.120	0.086	0.206
F5BM@3.5'	3.5		ND	ND	ND	ND	ND	ND	ND	ND
F6BE@3.5'	3.5		ND	ND	ND	ND	ND	ND	0.020	0.020
F8NE@1.5'	1.5		ND	ND	ND	ND	ND	ND	0.033	0.033
F9NW@1.5'	1.5		ND	ND	ND	ND	ND	ND	ND	ND
F12E@1.5'	1.5		ND	ND	ND	ND	ND	0.047	0.038	0.085
F13SE@1.5'	1.5		ND	ND	ND	ND	ND	ND	ND	ND
F14SW@1.5'	1.5		ND	ND	ND	ND	ND	ND	0.018	0.018
F15BW@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
F16W@2.0'	2.0	2	ND	ND	ND	ND	ND	ND	0.029	0.029
F17BFW@4.0'	4.0		ND	ND	ND	ND	ND	ND	ND	ND
J3E@2.5'	2.5		ND	ND	ND	ND	ND	0.057	0.081	0.138
J5B@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	0.017	0.017
J6N@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	
J7S@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
J8WN@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
J10BW@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND
J12WS@2.5'	2.5		ND	ND	ND	ND	ND	0.310	0.150	
K1S@2.5'	2.5		ND	ND	ND	ND	ND	ND	ND	ND
K2N@2.5'	2.0		ND	ND	ND	ND	ND	0.100	0.094	0.194
K3E@2.5'	2.5		ND	ND	ND	ND	ND	0.180	0.100	
K4W@2.5'	2.5		ND	ND	ND	ND	ND	0.013	0.016	
K5B@5.0'	5.0			ND	ND	ND	ND	0.096	0.100	

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		Revised			A	roclor	,			PCBs
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	$(total)^{(b)}$
AND DEPTH	(ft bgs)	(ft bgs)					on (mg/kg	()		, ,
Cleanup Area H 2007							<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>		
H5B@4.0'	4.0	6.8	ND	ND	ND	ND	ND	ND	ND	ND
H6NE@2.0'	2.0	4.5	ND	ND	ND	ND	ND	0.075	0.056	0.131
H9SW@2.0'	2.0	11	ND	ND	ND	ND	ND	ND	ND	ND
H10EN@2.0'	2.0	4.6	ND	ND	ND	ND	ND	ND	ND	ND
H11ES@2.0'	2.0	4.75	ND	ND	ND	ND	ND	ND	ND	ND
H12WN@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H13WS@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H14BNE@4.0'	4.0		ND	ND	ND	ND	ND	ND	ND	ND
H15BSW@4.0'	4.0		ND	ND	ND	ND	ND	ND	ND	ND
H17SE@2.0'	2.0		ND	ND	ND	ND	ND	0.038	0.052	0.090
H18EN@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H19ES@2.0'	2.0		ND	ND	ND	ND	ND	0.130	0.071	0.201
H21BNE@6.0'	6.0		ND	ND	ND	ND	ND	ND	ND	ND
H24NW/COR@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H25NW/W@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H26BNW/W@4.0'	4.0		ND	ND	ND	ND	ND	ND	ND	ND
H27BNW/E@4.0'	4.0		ND	ND	ND	ND	ND	0.038	0.035	0.073
H28 NW/SE@2.0'	2.0		ND	ND	ND	ND	ND	0.027	0.054	
H30 NW/NW@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
H31 NWB@4.0'	4.0		ND	ND	ND	ND	ND	ND	0.016	
H32NECORNER@2'	2.0		ND	ND	ND	ND	ND	0.023	0.016	
H33NECBOTTOM@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND
H34NN@2'	2.0		ND	ND	ND	ND	ND	0.034	0.033	0.067
H35ECORNER@2.0'	2.0		ND	ND	ND	ND	ND	0.240	0.260	0.500
H36SESIDEWALL@2.0'	2.0		ND	ND	ND	ND	ND	0.036	0.040	
H37EB@4.0'	4.0		ND	ND	ND	ND	ND	ND	ND	
Cleanup Area G 2008										
G1N@3.0'	3.0	4	ND	ND	ND	ND	ND	0.057	0.100	0.157
G3E@2.0'	2.0	2.5	ND	ND	ND	ND	ND	0.160	0.032	0.192
G5SW@3.5'	3.5	4	ND	ND	ND	ND	ND	0.021	0.030	0.051
G6NW@2.0'	2.0		ND	ND	ND	ND	ND	ND	ND	ND
G8SWB@6.5'	6.5	6.5	ND	ND	ND	ND	ND	0.026	0.029	0.055
G10B@7.5'	7.5		ND	ND	ND	ND	ND	0.055	0.074	
G11S@3.0'	3.0	1	ND	ND	ND	ND	ND	0.071	0.074	
G18BN@7.0'	7.0		ND	ND	ND	ND	ND	0.080	0.090	
G20BW@7.0'	7.0		ND	ND	ND	ND	ND	0.044	0.054	
G24BW@7.0'	7.0		ND	ND	ND	ND	ND	0.140	0.071	0.211
G34BN@7'	7.0		ND	ND	ND	ND	ND	0.049	0.050	
G39BOTWS@7'	7.0		ND	ND	ND	ND	ND	ND	ND	
G41BOTN@7.5'	7.5		ND	ND	ND	ND	ND	0.078	0.079	
G52BOTE6.5'	6.5	1	ND	ND	ND	ND	ND	ND	ND	
G55SESW@6.5'	6.5		ND	ND	ND	ND	ND	0.036	0.046	
G58BOT@9.5'	9.5		ND	ND	ND	ND	ND	0.360	0.710	
G59BOT@9.5'	9.5	+ +	ND	ND	ND	ND	ND	0.160	0.260	
G60BOT SEN@8'	8.0		ND	ND	ND	ND	ND	0.140	0.400	
G61BOT SES@8'	8.0		ND	ND	ND	ND	ND	0.130	0.180	
G62SE@4.5'	4.5	1	ND	ND	ND	ND	ND	0.240	0.450	
G63SE@4.5'	4.5		ND	ND	ND	ND	ND	3.400	4.800	

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		Revised			A	roclor	,			PCBs
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	$(total)^{(b)}$
AND DEPTH	(ft bgs)	(ft bgs)	I	Į.		ncentrati	on (mg/kg	;)		
G64SE@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.380	0.680	1.060
G65SE@4.5'	4.5	4.5	ND	ND	ND	ND	ND	1.200	2.100	3.300
G66E@4.5'	4.5	5.5	ND	ND	ND	ND	ND	0.032	0.049	0.082
G67NE@4.5'	4.5	5.5	ND	ND	ND	ND	ND	ND	0.013	0.013
G68NE@4.5'	4.5	5.5	ND	ND	ND	ND	ND	0.120	0.240	0.360
G69N@4.5'	4.5	5.5	ND	ND	ND	ND	ND	ND	ND	ND
G70@8.5'	8.5	8.5	ND	ND	ND	ND	ND	0.200	0.190	0.390
G72@8'	8.0	8	ND	ND	ND	ND	ND	0.330	0.410	0.740
G73@11.5'	11.5	12.5	ND	ND	ND	ND	ND	0.052	0.066	0.118
G74@11.5'	11.5	11.5	ND	ND	ND	ND	ND	0.034	0.051	0.085
G76NWBot@10'	10.0	12.5	ND	ND	ND	ND	ND	ND	ND	ND
G77NW@4.5'	4.5	7	ND	ND	ND	ND	ND	0.120	0.130	0.250
G78NW@9'	9.0	11.5	ND	ND	ND	ND	ND	3.400	2.100	5.500
G79WN@4.5'	4.5	7	ND	ND	ND	ND	ND	ND	ND	ND
G80WN@9'	9.0	11.5	ND	ND	ND	ND	ND	1.400	1.400	2.800
G81NWBot@10'	10.0	12.5	ND	ND	ND	ND	ND	1.600	1.300	2.900
G82NBot@5'	5.0	7	ND	ND	ND	0.52	ND	0.450	0.370	
G83@10'	10.0	10	ND	ND	ND	ND	ND	0.200	0.300	
G84@11.5'	11.5	11.5	ND	ND	ND	ND	ND	ND	ND	ND
G85@5'	5.0	6	ND	ND	ND	ND	ND	0.200	0.200	
G86@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.360	0.720	
G87@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.220	0.230	
G88@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.920	0.910	
G89@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.870	0.790	
G90@3'	3.0	3	ND	ND	ND	ND	ND	1.300	1.200	
G91@3'	3.0	4	ND	ND	ND	ND	ND	0.830	0.720	
G92@3'	3.0	4	ND	ND	ND	ND	ND	0.310	0.280	
G93@3'	3.0	4	ND	ND	ND	ND	ND	2.300	2.300	
G94@4'	4.0	5	ND	ND	ND	ND	ND	ND	ND	ND
G95@3'	3.0	5	ND	ND	ND	ND	ND	1.200	1.200	
G96@4'	4.0	6	ND	ND	ND	ND	ND	ND	ND	ND
G97@7.5'	7.5	8.5	ND	ND	ND	ND	ND	ND	ND	ND
QTR-G1-N@4'	4.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTR-G1-SW-W@5'	5.0		ND	ND	ND	ND	ND	ND	ND	
QTR-G2-W@6.5'	6.5	6.5	ND	ND	ND	ND	ND	ND	ND	ND
QTR-G2-N@4.5'	4.5	4.5	ND	ND	ND	ND	ND	ND	ND	0.012
QTP-G5SE@4.5'	4.5	4.5	ND	ND	ND	ND	ND	0.048	0.063	0.111
QTP-G6SW@4.5'	4.5	5.5	ND	ND	ND	ND	ND	0.130	0.150	0.280
QTP-G7W@4.5'	4.5	5.5	ND	ND	ND	ND	ND	0.270	0.092	0.362
QTP-11@9'	9.0	9	ND	ND	ND	ND	ND	ND	ND	
QTP-12@9'	9.0		ND	ND	ND	ND	ND	0.210	0.320	
QTP-13@9'	9.0		ND	ND	ND	ND	ND	ND	ND	
G-78@9'* TTLC	9.0		ND	ND	ND	ND	ND	3.400	2.500	
Nov. 2007 Sampling										
QTP-BF#1-1@3'	3.0	5.25	ND	ND	ND	ND	ND	0.130	0.170	0.300
QTP-BF#1-1@4'	4.0		ND	ND	ND	ND	ND	1.400	2.000	
OTP-BF#1-1@5.5'	5.5		ND	ND	ND	ND	ND	ND	ND	ND
QTP-BF#2-1@3'	3.0		ND	ND	ND	ND	ND	2.100	2.000	4.100
QTP-BF#2-1@5'	5.0		ND	ND	ND	ND	ND	ND	ND	

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		Revised	Aroclor									
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	PCBs (total) ^(b)		
AND DEPTH	(ft bgs)	(ft bgs)	1010	1221			on (mg/kg		1200	(**************************************		
QTP-BF#2-2@3'	3.0	3	ND	ND	ND	ND	ND	1.600	1.600	3.200		
QTP-BF#2-2@5'	5.0		ND	ND	ND	ND	ND	ND	ND	3.200 ND		
QTP-BF#3-1@3'	3.0		ND	ND	ND	ND	ND	0.100	0.079	0.179		
QTP-BF#3-1@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-BF#3-2@3'	3.0		ND	ND	ND	ND	ND	0.039	0.057	0.090		
QTP-BF#3-2@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-BF#3-3@3'	3.0		ND	ND	ND	ND	ND	0.290	0.370	0.660		
QTP-BF#3-3@6'	6.0		ND	ND	ND	ND	ND	0.022	0.017	0.039		
QTP-BF#3-4@3'	3.0		ND	ND	ND	ND	ND	0.430	0.320	0.750		
QTP-BF#3-4@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-OS-2@3'	3.0		ND	ND	ND	ND	ND	0.730	0.640	1.370		
QTP-OS-2@5'	5.0		ND	ND	ND	ND	ND	0.730	0.040	0.057		
QTP-CL#1-1@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#1-1@4.5'	4.5	7.5	ND ND	ND	ND	ND	ND	0.076	0.098	0.174		
QTP-CL#1-1@6'	6.0		ND	ND	ND	ND	ND	0.160	0.220	0.174		
QTP-CL#1-1@8'	8.0		ND	ND	ND	ND	ND	15.000	38.000	53.000		
OTP-CL#1-1@10'	10.0	13	ND	ND	ND	ND	ND	0.024	0.034	0.058		
QTP-SD1@3'	3.0		ND	ND	ND	ND	ND	0.024	0.035	0.083		
QTP-SD1@5'	5.0		ND	ND	ND	ND	ND	0.022	0.029	0.051		
QTP-SLT-1@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-SLT-1@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-AZ-1@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-AZ-1@4.5'	4.5	6.75	ND	ND	ND	ND	ND	ND	ND	ND		
QTP-PL-1@3'	3.0		ND	ND	ND	ND	ND	0.220	0.580	0.900		
QTP-PL-1@5.5'	5.5	6.25	ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-1@3'	3.0		ND	ND	ND	ND	ND	2.000	2.200	4.200		
QTP-CL#3-1@4.5'	4.5	4.5	ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-1@6'	6.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-2@3'	3.0		ND	ND	ND	ND	ND	2.100	2.700	4.800		
QTP-CL#3-2@4.5'	4.5	3.5	ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-3@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-3@5'	5.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-CL#3-3@7'	7.0		ND	ND	ND	ND	ND	0.028	0.031	0.059		
QTP-CL#3-3@9'	9.0		ND	ND	ND	ND	ND	0.049	0.016			
QTP-PP-1@3'	3.0		ND	ND	ND	ND	ND	0.700	0.580			
OTP-PP-1@5'	5.0		ND	ND	ND	ND	ND	0.280	0.220			
QTP-PP-1@6.5'	6.5		ND	ND	ND	ND	ND	0.400	0.340			
QTP-PP-1@8'	8.0		ND	ND	ND	ND	ND	0.087	0.073			
QTP-OS-1@3'	3.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-OS-1@5'	5.0		ND	ND	ND	ND	ND	0.059	0.067	0.126		
QTP-OS-1@7'	7.0		ND	ND	ND	ND	ND	0.035	0.007	0.120		
Feb. 2008 Test Pit Sampling	7.0	<u> </u>	110	110	1110	1112	1112	0.023	5.022	3.0-77		
QTP-08-01@3'	3.0	7	ND	ND	ND	ND	ND	ND	ND	ND		
OTP-08-01@4'	4.0		ND	ND	ND	ND	ND	ND	ND	ND		
QTP-08-02@6" (0.5')	0.5		ND	ND	ND	ND	ND	1.200	1.100	2.300		
QTP-08-02@3.0'	3.0		ND	ND	ND	ND	ND	ND	ND	2.300 ND		
QTP-08-03@18" (1.5')	1.5		ND	ND	ND	ND	ND	ND ND	ND	ND		
QTP-08-03@3'	3.0		ND	ND	ND	ND	ND	ND ND	ND	ND		
QTP-08-04@1.5'	1.5		ND	ND ND	ND	ND ND	ND ND	ND ND	ND			

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		Revised			A	roclor	•			PCBs
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	$\left(total \right)^{(b)}$
AND DEPTH	(ft bgs)	(ft bgs)	L		Co	ncentrati	on (mg/kg	<u> </u>		
QTP-08-04@3.0'	3.0	6	ND	ND	ND	ND	ND	ND	ND	0.015
QTP-08-04@4.5'	4.5	7.5	ND	ND	ND	ND	ND	0.039	0.053	0.094
QTP-08-05@1.5'	1.5	1.5	ND	ND	ND	ND	ND	0.230	0.170	0.400
QTP-08-05@2.5'	2.5	2.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-06@0.5'	0.5	0.7	ND	ND	ND	ND	ND	0.100	0.180	0.280
QTP-08-06@0.5'	0.5	0.7	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-06@1.5'	1.5	1.7	ND	ND	ND	ND	ND	ND	0.023	0.023
QTP-08-07@0.5'	0.5	1.5	ND	ND	ND	ND	ND	0.019	0.025	0.044
QTP-08-07@1.5'	1.5	2.5	ND	ND	ND	ND	ND	0.038	0.075	0.113
QTP-08-08@1.0'	1.0	1	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-08@20" (1.7')	1.7	1.7	ND	ND	ND	ND	ND	0.490	0.680	1.070
QTP-08-08@42" (3.5')	3.5	3.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-08INNER@12" (1.0')	1.0	1	ND	ND	ND	ND	ND	0.390	0.510	0.900
QTP-08-09@1.5'	1.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-09@2.5'	2.5		ND	ND	ND	ND	ND	2.800	3.900	5.700
QTP-08-09@4.0'	4.0	4	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-10@2.5'	2.5	2.5	ND	ND	ND	ND	ND	ND	0.012	0.012
QTP-08-10@4.0'	4.0	4	ND	ND	ND	ND	ND	3.000	4.700	7.700
QTP-08-10@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-11@28" (2.33')	2.3	2.33	ND	ND	ND	ND	ND	0.420	0.490	0.910
QTP-08-11@3.0'	3.0	3	ND	ND	ND	ND	ND	0.220	0.460	0.680
QTP-08-11@4.0'	4.0	4	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-12@2.5'	2.5	2.5	ND	ND	ND	ND	ND	0.290	0.360	0.670
QTP-08-12@5'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-13@2.5'	2.5	2.5	ND	ND	ND	ND	ND	0.240	0.230	0.470
QTP-08-13@4'	4.0	4	ND	ND	ND	ND	ND	0.260	0.760	1.020
QTP-08-13@5'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-14@3.5'	3.5	5	ND	ND	ND	ND	ND	2.700	3.100	5.800
QTP-08-14@4.5'	4.5	6	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-14@5.5'	5.5	7	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-15@3.5'	3.5	6	ND	ND	ND	ND	ND	1.200	1.100	2.300
QTP-08-15@4.5'	4.5	7	ND	ND	ND	ND	ND	1.100	1.100	2.200
QTP-08-15@5.5'	5.5	8	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-16@1.5'	1.5	4.5	ND	ND	ND	ND	ND	0.830	1.400	2.230
QTP-08-16@4'	4.0	7	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-17@12" (1.0')	1.0	2.9	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-17@48" (4.0')	4.0	5.9	ND	ND	ND	ND	ND	16.000	31.000	47.000
QTP-08-18@2.0'	2.0	2	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-18@3.75'	3.8	3.75	ND	ND	ND	ND	ND	0.076	0.090	0.166
QTP-08-18@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-19@2.0'	2.0	2	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-19@3.5'	3.5	3.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-20@2.5'	2.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-20@5.0'	5.0	4	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-21@2.5'	2.5	2.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-21@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-22@2.0'	2.0	1.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-22@4.0'	4.0	3.5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-23@1.5'	1.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND

Table 1: November 2007 and February 2008 Soil Sample Results Summary

		Revised			A	roclor				PCBs
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	$\left(total \right)^{(b)}$
AND DEPTH	(ft bgs)	(ft bgs)				ncentratio				,
QTP-08-23@3.5'	3.5		ND	ND	ND	ND	ND	0.150	0.170	0.320
QTP-08-23@5.5'	5.5		ND	ND	ND	ND	ND	0.110	0.130	
QTP-08-24@20" (1.67')	1.7	1.67	ND	ND	ND	ND	ND	0.110	0.130	
QTP-08-24@48" (4.0')	4.0		ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-25@2.0'	2.0		ND	ND	ND	ND	ND	0.064	0.072	0.136
QTP-08-26@8" (0.67')	0.7		ND	ND	ND	ND	ND	0.014	0.029	0.043
QTP-08-27@1.0'	1.0		ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-27@3.5'	3.5		ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-27@5.0'	5.0	5	ND	ND	ND	ND	ND	ND	ND	ND
QTP-08-28@2.5'	2.5	3.5	ND	ND	ND	ND	ND	0.200	0.350	0.550
QTP-08-28@4.5'	4.5	5.5	ND	ND	ND	ND	ND	2.900	3.700	6.600
QTP-08-28@6.0'	6.0	7	ND	ND	ND	ND	ND	ND	ND	ND
Feb. 2008 Borehole Sampling										
QB-08-01@2'	2.0	3.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-01@6'	6.0	7.5	ND	ND	ND	ND	ND	2.300	3.300	5.600
QB-08-01@8'	8.0	9.5	ND	ND	ND	ND	ND	0.320	0.420	0.740
QB-08-01@10'	10.0	11	ND	ND	ND	ND	ND	0.890	0.750	1.640
QB-08-01@12'	12.0	13.5	ND	ND	ND	ND	ND	0.019	0.021	0.039
QB-08-02@1'	1.0	2.5	ND	ND	ND	ND	ND	0.180	0.200	0.380
QB-08-02@6'	6.0	7.5	ND	ND	ND	ND	ND	0.100	0.110	0.210
QB-08-02@10'	10.0	11.5	ND	ND	ND	ND	ND	0.360	0.410	0.770
QB-08-02@11.5'	11.5	13	ND	ND	ND	ND	ND	0.760	0.620	1.380
QB-08-02@13'	13.0	14.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-03@5.5'	5.5	9.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-03@8'	8.0	12	ND	ND	ND	ND	ND	0.280	0.350	0.630
QB-08-03@11.5'	11.5	15.5	ND	ND	ND	ND	ND	0.040	0.044	0.084
QB-08-03@14.5'	14.5	18.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-03@15.5'	15.5	19.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-04@3.5'	3.5	5	ND	ND	ND	ND	ND	0.400	0.430	0.830
QB-08-04@6'	6.0	7.5	ND	ND	ND	ND	ND	0.740	0.910	1.650
QB-08-04@9'	9.0	10.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-04@12.5'	12.5	14	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-04@14.5'	14.5	16	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-04@20'	20.0	21.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-05@2'	2.0	3	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-05@5'	5.0	6	ND	ND	ND	ND	ND	0.190	0.280	0.470
QB-08-05@7'	7.0	8	ND	ND	ND	ND	ND	0.440	0.610	1.050
QB-08-05@12'	12.0	13	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-05@13.5'	13.5	14.5	ND	ND	ND	ND	ND	ND	ND	ND
QB-08-06@7'	7.0	6.75	ND	ND	ND	ND	ND	0.220	0.240	0.460
QB-08-06@10'	10.0	9.75	ND	ND	ND	ND	ND	0.330	0.490	0.820
QB-08-06@13'	13.0	12.75	ND	ND	ND	ND	ND	0.068	0.140	0.208
QB-08-06@14'	14.0		ND	ND	ND	ND	ND	ND	ND	
QB-08-07@1.5'	1.5		ND	ND	ND	ND	ND	0.058	0.072	0.130
QB-08-07@3.5'	3.5		ND	ND	ND	ND	ND	0.017	ND	
QB-08-07@6.5'	6.5		ND	ND	ND	ND	ND	ND	ND	ND
QB-08-07@10'	10.0		ND	ND	ND	ND	ND	0.023	ND	0.023
QB-08-07@11.5'	11.5		ND	ND	ND	ND	ND	ND	ND	ND
QB-08-08@3'	3.0		ND	ND	ND	ND	ND	0.330	0.520	

Table 1: November 2007 and February 2008 Soil Sample Results Summary

		Revised	Aroclor									
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	(total) ^(b)		
AND DEPTH	(ft bgs)	(ft bgs)			Co	oncentratio	on (mg/kg	<u>;)</u>				
QB-08-08@5.5'	5.5	5.5	ND	ND	ND	ND	ND	ND	0.014	0.014		
QB-08-08@8'	8.0	8	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-08@12'	12.0	12	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-08@14'	14.0	14	ND	ND	ND	ND	ND	0.260	0.420	0.680		
QB-08-08@14.5'	14.5	14.5	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-09@3.5'	3.5	5.5	ND	ND	ND	ND	ND	0.390	0.580	0.970		
QB-08-09@7.5'	7.5	9.5	ND	ND	ND	ND	ND	0.067	0.110	0.177		
QB-08-09@8'	8.0	10	ND	ND	ND	ND	ND	1.100	1.800	2.900		
QB-08-10@4.5'	4.5	8.5	ND	ND	ND	ND	ND	0.520	0.920	1.440		
QB-08-10@7.5'	7.5	11.5	ND	ND	ND	ND	ND	0.440	0.780	1.220		
QB-08-10@9'	9.0	13	ND	ND	ND	ND	ND	0.250	0.520	0.770		
QB-08-10@11.5'	11.5	15.5	ND	ND	ND	ND	ND	0.220	0.160	0.380		
QB-08-10@13'	13.0	17	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-11@2'	2.0	7	ND	ND	ND	ND	ND	0.620	0.860	1.480		
QB-08-11@4'	4.0	9	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-11@5.5'	5.5	10.5	ND	ND	ND	ND	ND	1.500	2.600	4.100		
QB-08-11@7'	7.0	12	ND	ND	ND	ND	ND	ND	ND			
QB-08-11@10'	10.0	15	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-12@1'	1.0	6	ND	ND	ND	ND	ND	1.800	2.500	4.300		
QB-08-12@3.5'	3.5	8.5	ND	ND	ND	ND	ND	0.170	0.400	0.570		
QB-08-12@6'	6.0	11	ND	ND	ND	ND	ND	0.460	0.810	1.270		
QB-08-12@6.5'	6.5	11.5	ND	ND	ND	ND	ND	0.250	0.360	0.610		
QB-08-12@11'	11.0	16	ND	ND	ND	ND	ND	0.200	0.310	0.510		
QB-08-12@13'	13.0	18	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-13@2'	2.0	2	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-13@3'	3.0	3	ND	ND	ND	ND	ND	ND	ND	ND		
QB-08-14@2'	2.0	5	ND	ND	ND	ND	ND	0.540	0.730	1.270		
QB-08-14@5'	5.0	8	ND	ND	ND	ND	ND	0.200	0.240	0.440		
QB-08-14@8'	8.0	11	ND	ND	ND	ND	ND	0.430	0.460	0.890		
QB-08-14@11'	11.0	14	ND	ND	ND	ND	ND	0.240	0.290	0.530		
QB-08-14@13'	13.0	16	ND	ND	ND	ND	ND	ND	ND	ND		

⁽a) Sample depth changes due to Site grading activities in 2012.

⁽b) Total concentration is the summation of the 7 PCBs reported in the laboratory reports for each sample, not including non-detectable results.

⁽c) Not Detected at or above the analytical method reporting limit reported for that isomer

Table 2: November 2007 and February 2008 Groundwater Sample Results Summary

		Aroclor										
SAMPLE ID	1016	1221	1232	1242	1248	1254	1260	(total) ^(a)				
		Concentration (µg/L)										
QB-08-01 GW	ND ^(b)	ND	ND	ND	ND	ND	ND	ND				
QB-08-02 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-05 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-06 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-07 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-08 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-10 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-12 GW	ND	ND	ND	ND	ND	ND	ND	ND				
QB-08-14 GW	ND	ND	ND	ND	ND	ND	ND	ND				

⁽a) Total concentration is the summation of the 7 PCBs reported in the laboratory reports for each sample, not including non-detectable results.

⁽b) Not Detected at or above the analytical method reporting limit reported for that isomer

Table 3: Surface Sediment Sample Results Summary

		Revised	11100101								
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254	1260	(total ^(b)	
AND DEPTH	(ft bgs)	(ft bgs)		Concentration (mg/kg)							
Swale Sed-CL#3	0.3	0.3	ND ^(c)	ND	ND	ND	ND	0.450	0.650	1.100	
SW-4-Surface	0.3	0.3	ND	ND	ND	ND	ND	0.390	0.420	0.810	
SW-6-Surface	0.3	0.3	ND	ND	ND	ND	ND	0.050	0.051	0.101	
SW-7-Surface	0.3	0.3	ND	ND	ND	ND	ND	0.036	0.056	0.092	
SW-3-Surface	0.3	0.3	ND	ND	ND	ND	ND	0.027	0.031	0.058	
SW-2-Surface	0.3	0.3	ND	ND	ND	ND	ND	0.012	0.013	0.025	
SW-5-Surface	0.3	0.3	ND	ND	ND	ND	ND	ND	ND	ND	

- (a) Sample depth changes due to Site grading activities in 2012.
- (b) Total concentration is the summation of the 7 PCBs reported in the laboratory reports for each sample, not including non-detectable results.
- (c) Not Detected at or above the analytical method reporting limit reported for that isomer

Table 4: Solubility Testing Sample Results Summary

		Revised				PCBs					
SAMPLE ID	Depth	Depth ^(a)	1016	1221	1232	1242	1248	1254.00	1260.00	(total) ^(b)	
AND DEPTH	(ft bgs)	(ft bgs)		•			Description				
SOL-1@9' STLC	9.0	11.8	ND (c)	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete
G-78@9'* TTLC	9.0	11.5	ND	ND	ND	ND	ND	3.400	2.500	5.900	Crushed Concrete
SOL-2@9' STLC	9.0	11.8	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete
SOL-2@9' TTLC	9.0	11.8	ND	ND	ND	ND	ND	1.100	1.300	2.400	Crushed Concrete
SOL-3@3' STLC	3.0	3.0	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete with soil
SOL-3@3' TTLC	3.0	3.0	ND	ND	ND	ND	ND	0.760	0.560	1.320	Crushed Concrete with soil
SOL-4@3' STLC	3.0	2.5	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete with soil
SOL-4@3' TTLC	3.0	2.5	ND	ND	ND	ND	ND	1.100	0.980	2.080	Crushed Concrete with soil
SOL-5@9.5' STLC	9.5	9.5	ND	ND	ND	ND	ND	ND	ND	ND	Brown Sandy Clay
SOL-5@9.5' TTLC	9.5	9.5	ND	ND	ND	ND	ND	0.085	0.090	0.175	Brown Sandy Clay
SOL-6@4.5' STLC	4.5	4.5	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete with soil
SOL-6@4.5' TTLC	4.5	4.5	ND	ND	ND	ND	ND	0.240	0.370	0.710	Crushed Concrete with soil
SOL-7@7' STLC	7.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	Brown Sandy Clay
SOL-7@7' TTLC	7.0	7.0	ND	ND	ND	ND	ND	0.250	0.190	0.430	Brown Sandy Clay
SOL-8@3' STLC	3.0	4.0	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete
SOL-8@3' TTLC	3.0	4.0	ND	ND	ND	ND	ND	0.730	0.760	1.490	Crushed Concrete
SOL-9@3' STLC	3.0	5.0	ND	ND	ND	ND	ND	ND	ND	ND	Crushed Concrete
SOL-9@3' TTLC	3.0	5.0	ND	ND	ND	ND	ND	8.400	14.000	22.400	Crushed Concrete
QTP-08-03@2.0' WET	2.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-10@2.5' WET	2.5	2.5	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-11@28" (2.33') WET	2.3	2.3	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-17@4.0' WET	4.0	5.9	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-19@3.0' WET	3.0	3.0	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-21@2.5' WET	2.5	2.5	ND	ND	ND	ND	ND	ND	ND	ND	
QTP-08-24@20" (1.67') WET	1.7	1.7	ND	ND	ND	ND	ND	ND	ND	ND	
QB-08-02@12' WET	12.0	13.5	ND	ND	ND	ND	ND	ND	ND	ND	
QB-08-06@6.5' WET	6.5	6.2	ND	ND	ND	ND	ND	ND	ND	ND	
QB-08-07@7.5' WET	7.5	6.5	ND	ND	ND	ND	ND	ND	ND	ND	
OB-08-08@12' WET	12.0	12.0	ND	ND	ND	ND	ND	ND	ND	ND	
OB-08-13@3' WET	3.0	3.0	ND	ND	ND	ND	ND	ND	ND	ND	STLC Results

ND = None Detected

All results in mg/kg

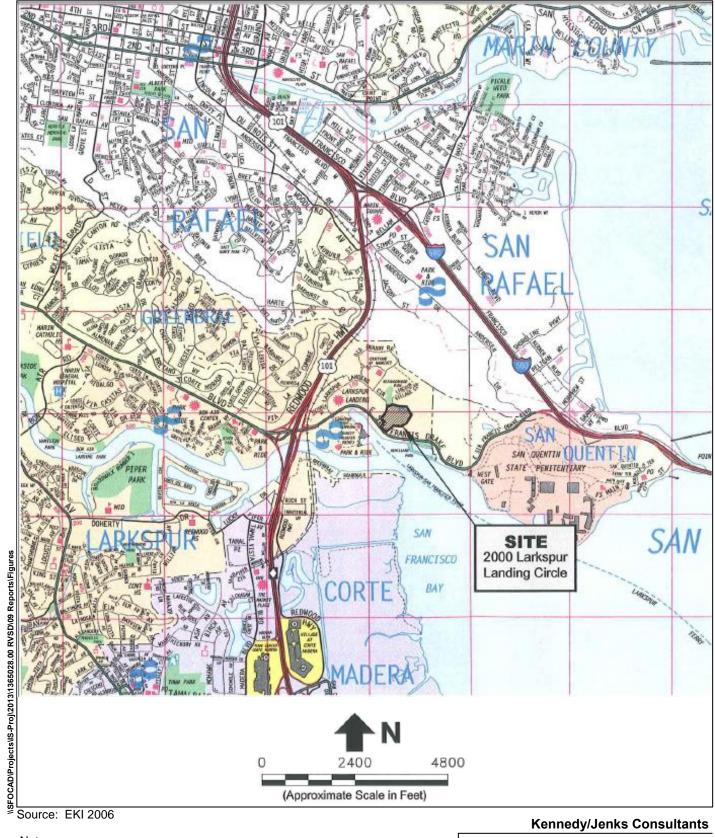
⁽a) Sample depth changes due to Site grading activities in 2012.

⁽b) Total concentration is the summation of the 7 PCBs reported in the laboratory reports for each sample, not including non-detectable results.

⁽c) Not Detected at or above the analytical method reporting limit reported for that isomer

^{*}Sample collected from the same location on an earlier date.

- Figure 1 Site Location Map
- Figure 2 Former Wastewater Treatment Plant Facilities
- Figure 3 Cross-sections Illustrating Extent of Post-demolition Fill
- Figure 4 Test Pit and Borehole Location Map
- Figure 5 2008 Solubility Sample Locations, Excavation Pit G
- Figure 6 Site Topographic Map Before to May 2012 Grading Activities
- Figure 7 Site Topographic Map After May 2012 Grading Activities
- Figure 8 Cut/Fill Map Based on May 2012 Grading Activities
- Figure 9 Location of Soil Samples exceeding TSCA Low Occupancy Threshold
- Figure 10 Proposed Phase I Development Parking Area



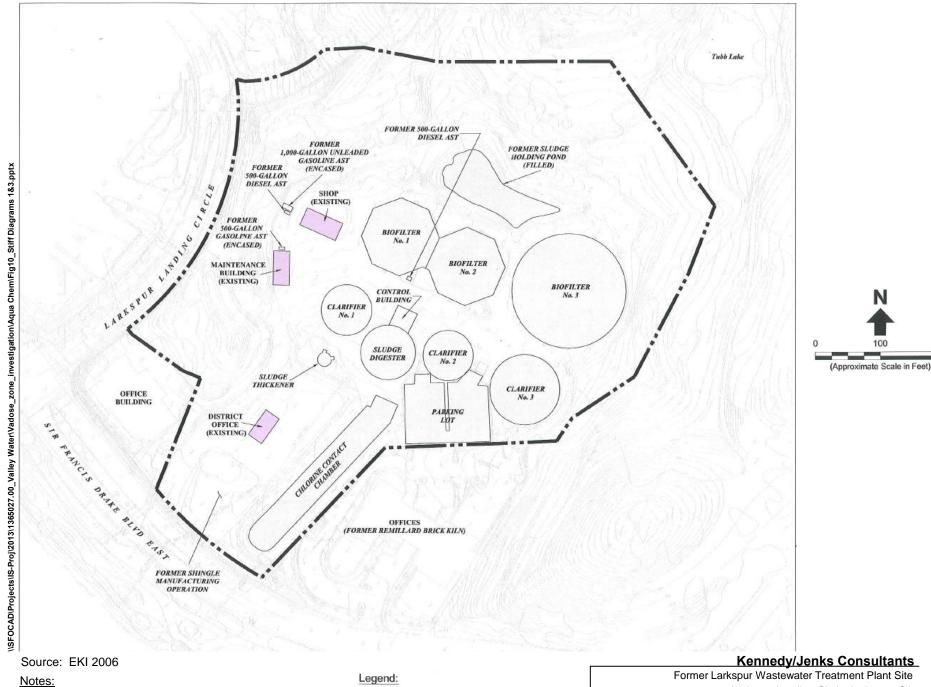
1. All locations are approximate

Kennedy/Jenks Consultants

Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Site Location Map

K/J 1365028*00 July 2014



1. All locations are approximate. Approximate Subject Property Boundary 2. Basemap source: Nate Engineering, San Former Site Features Rafael, California Abbreviations: Existing Site Features

Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

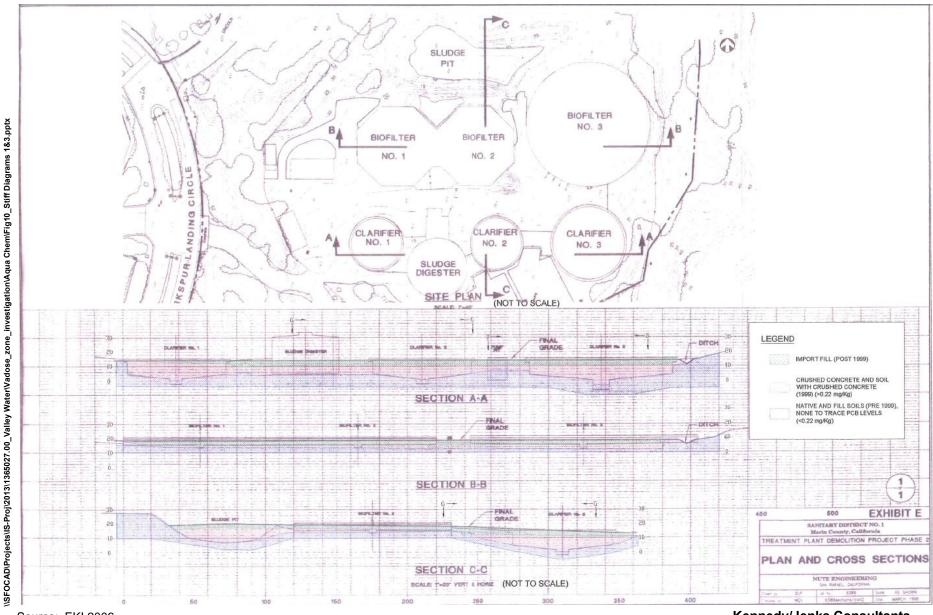
Former Wastewater Treatment Plant Facilities

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Figure 2

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AST = Above ground storage tank

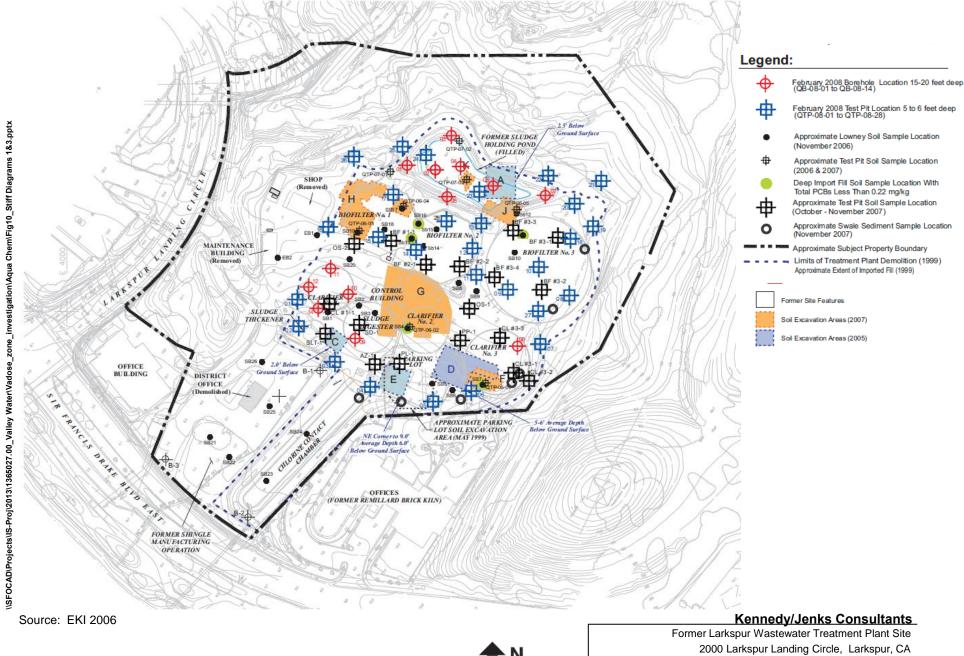


Source: EKI 2006

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Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Cross-sections Illustrating Extent of Post-demolition Fill

K/J 1365028*00 July 2014

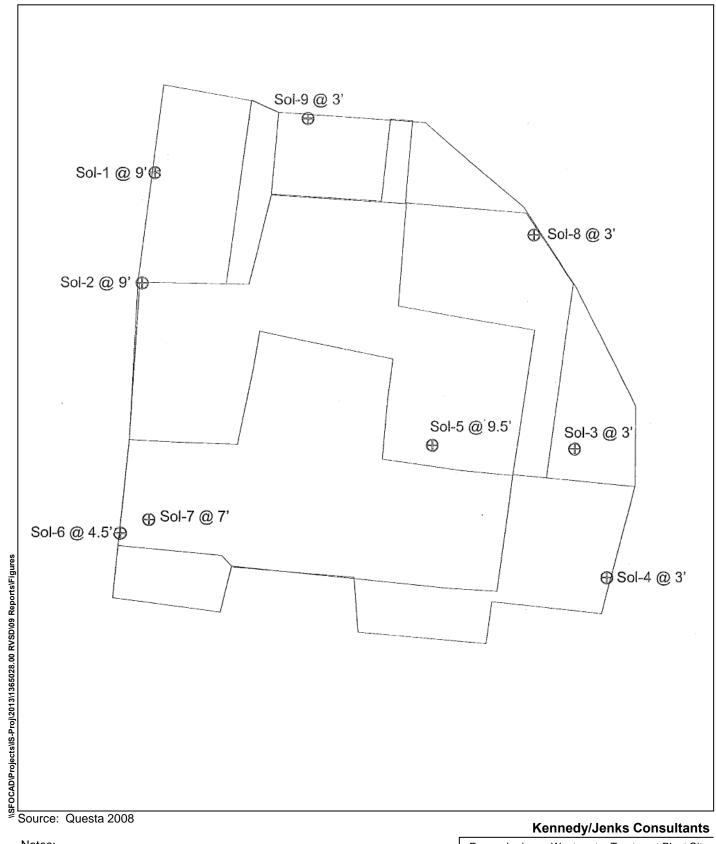


200

(Approximate Scale in Feet)

Test Pit and Borehole Location Map

K/J 1365028*00 July 2014



1. All locations approximate and not necessarily to scale

Kennedy/Jenks Consultants

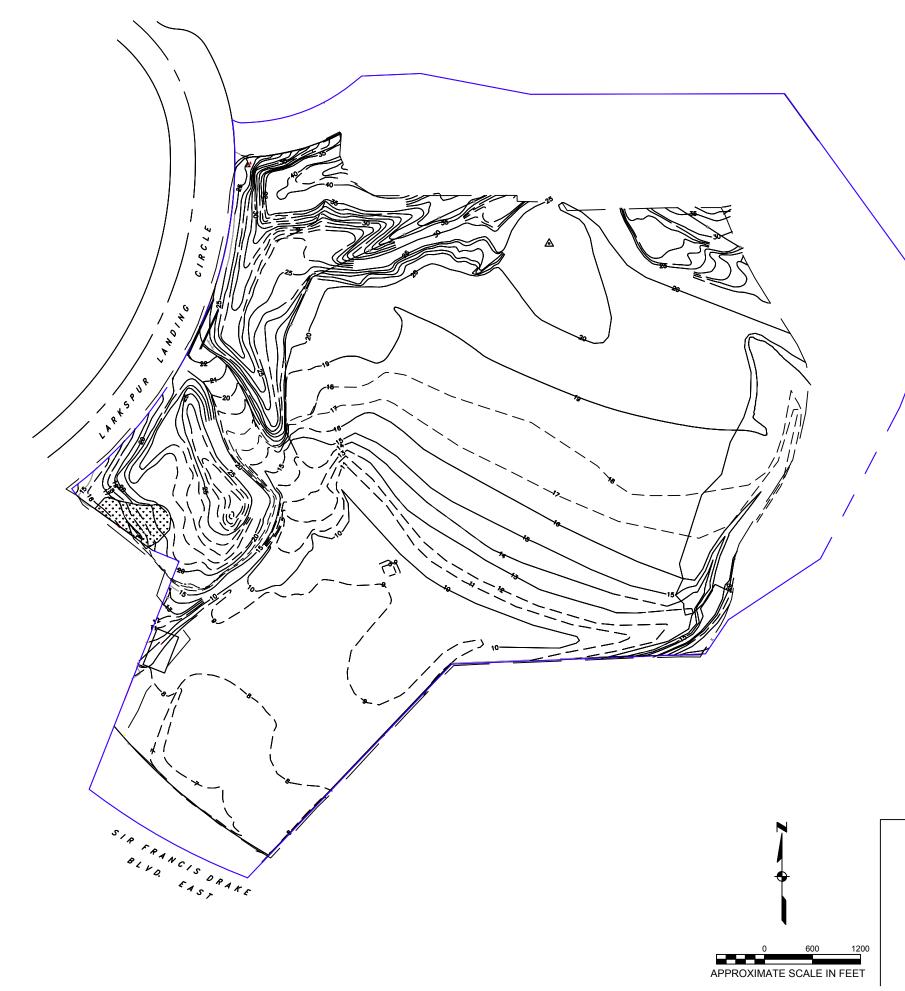
Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

2008 Solubility Sample Locations **Excavation Pit G**

K/J 1365028*00 July 2014



Approximate Subject Property Boundary

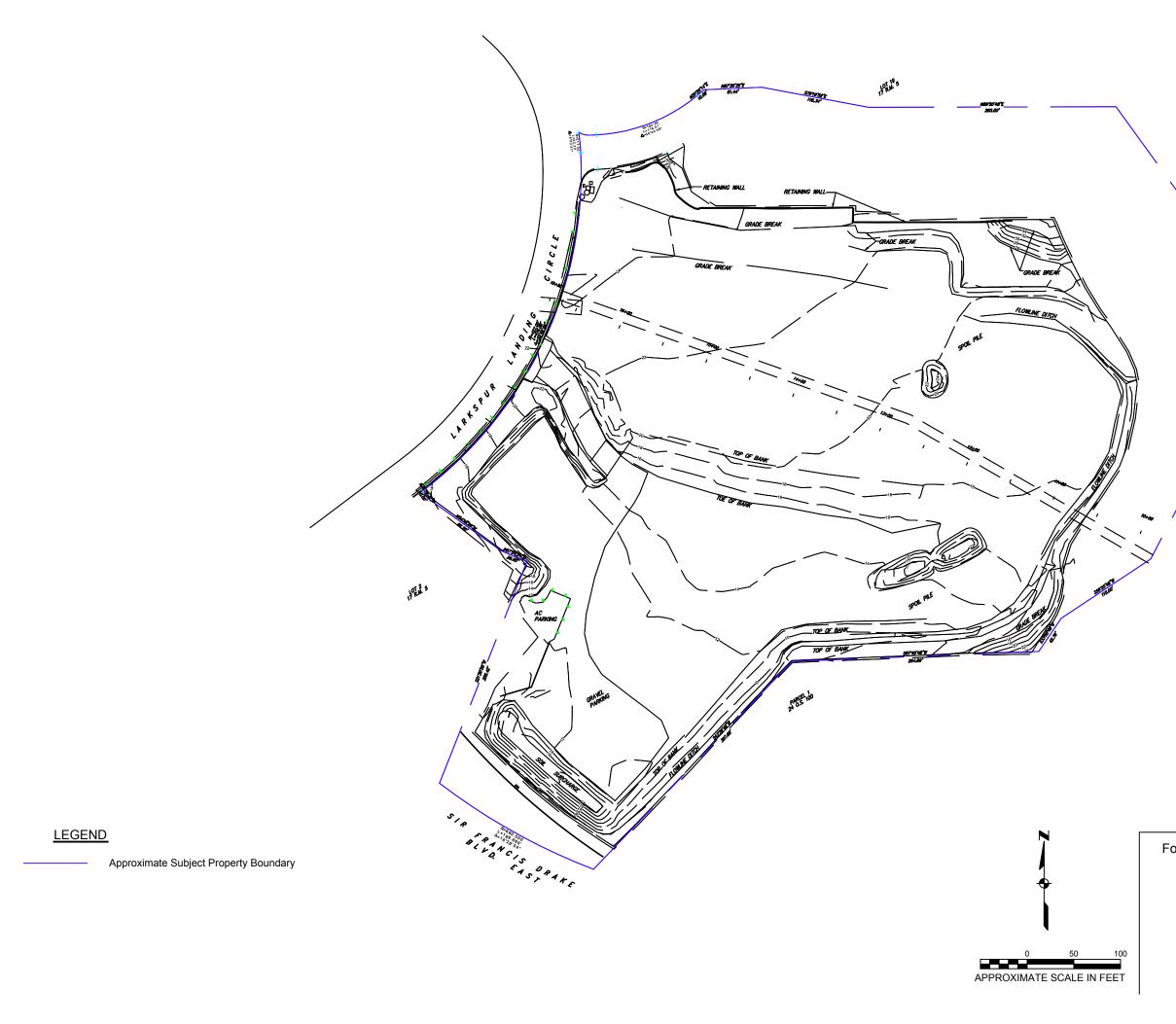


Kennedy/Jenks Consultants

Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Site Topographic Map Before May 2012 Grading Activities

K/J 1365028.00 July 2014



Kennedy/Jenks Consultants

Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Site Topographic Map After May 2012
Grading Activities

K/J 1365028.00 July 2014

LEGEND



February 2008 Borehole Location 15-20 feet deep (QB-08-01 to QB-08-14)



February 2008 Test Pit Location 5 to 6 feet deep (QTP-08-01 to QB-08-28)



Approximate Lowney Soil Sample Location (November 2006)



Approximate Test Pit Soil Sample Location (2006 & 2007)



Deep Import Fill Soil Sample Location with Total PCBs less than 0.22 mg/kg



Approximate Test Pit Soil Sample Location (October - November 2007)



Approximate Swale Sediment Sample Location (November 2007)



Soil Excavation Areas (2007)

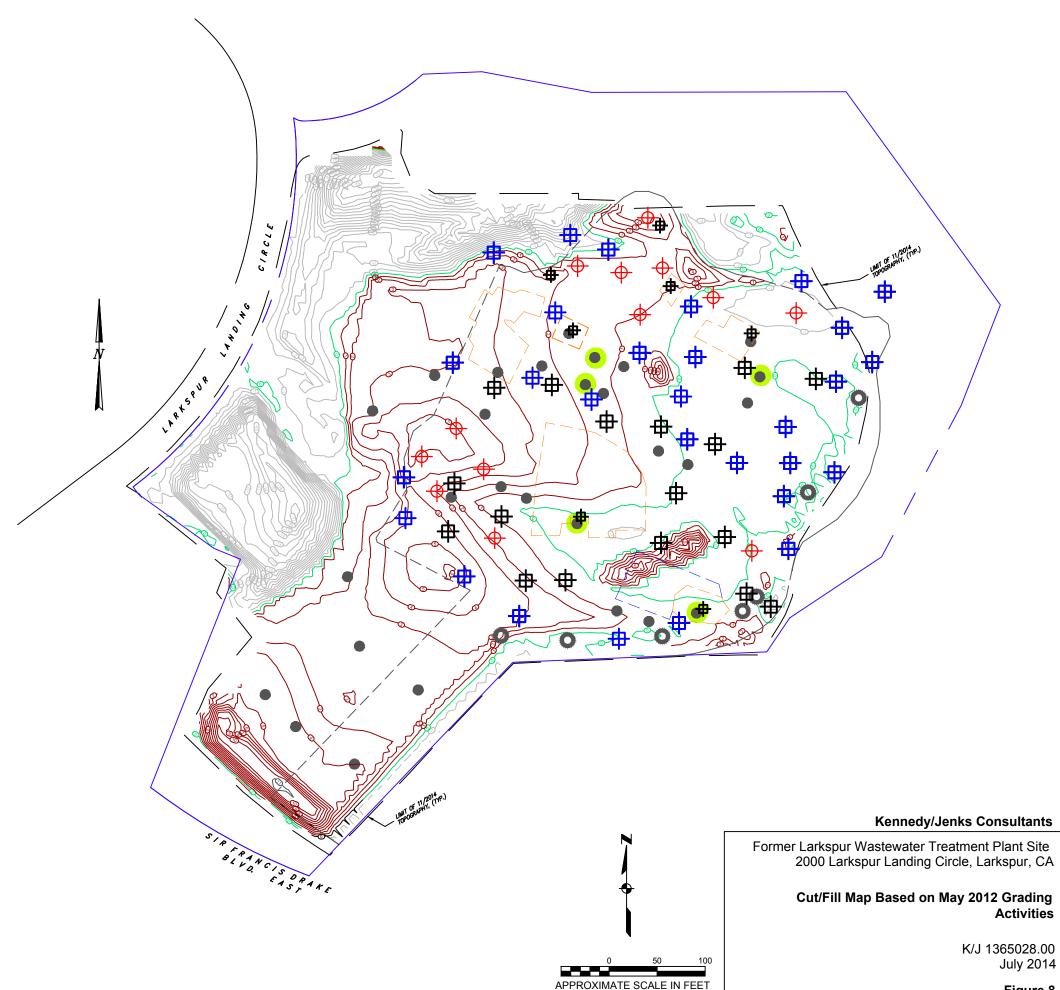


Soil Excavation Areas (2005)

Approximate Subject Property Boundary

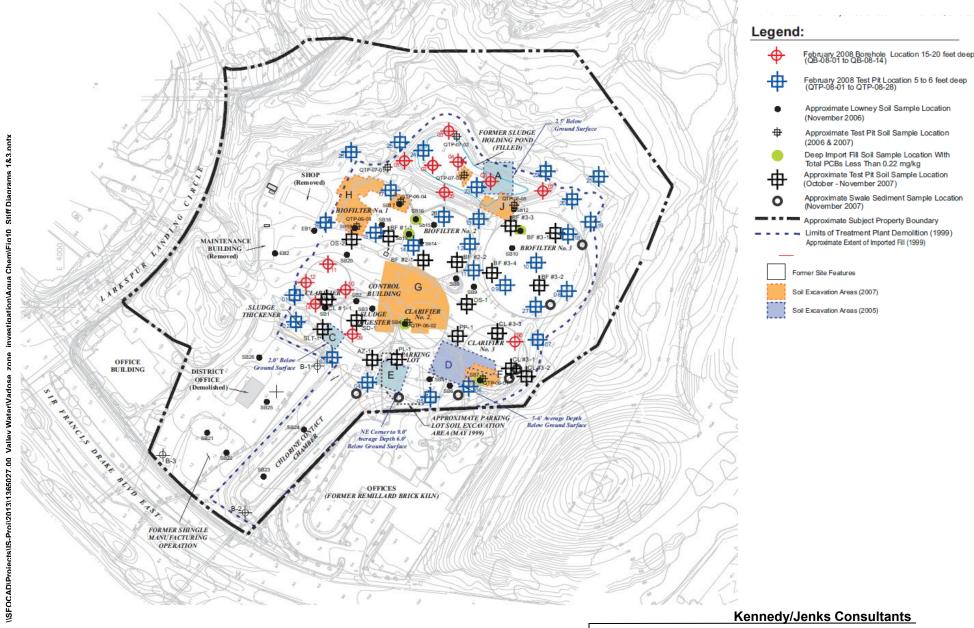
Cut Change in Elevation

Fill Change in Elevation

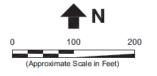


Activities

July 2014



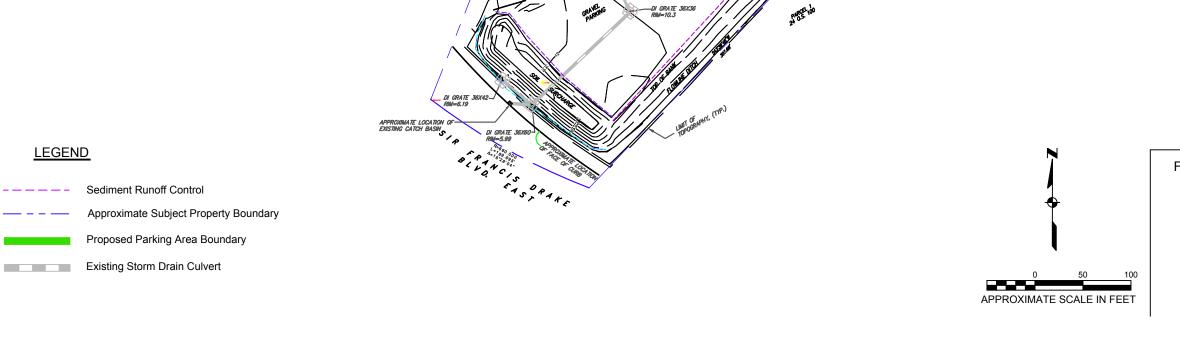
Source: Questa 2008



Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Location of Soil Samples Exceeding TSCA Low Occupancy Threshold

> K/J 1365028*00 July 2014



Kennedy/Jenks Consultants

Former Larkspur Wastewater Treatment Plant Site 2000 Larkspur Landing Circle, Larkspur, CA

Proposed Phase I Development Parking Area

K/J 1365028.00 July 2014





Curtis & Formpkins, Lich., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 199469 ANALYTICAL REPORT

Questa Engineering Corporation Project : 270025

1220 Brickyard Cove Road

Point Richmond, CA 94801

Location: Former Larkspur Treatment Plant

Level

: II

Sample ID	<u>Lab ID</u>
SOL-1@9'	199469-001
SOL-2@9'	199469-002
SOL-3@3'	199469-003
SOL-4@3'	199469-004
SOL-5@9.5'	199469-005
SOL-6@4.5'	199469-006
SOL-7@7'	199469-007
SOL-8@3'	199469-008
SOL-9@3'	199469-009

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Date: <u>12/10/2007</u>

Operations Manager

Date: <u>12/10/2007</u>

NELAP # 01107CA

Page 1 of

CASE NARRATIVE

Laboratory number:

199469

Client:

Questa Engineering Corporation

ToNESV

Project:

270025

Location:

Former Larkspur Treatment Plant

Request Date: Samples Received:

11/26/07 11/26/07

This hardcopy data package contains sample and QC results for nine soil samples, requested for the above referenced project on 11/26/07. The samples were received intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082) Soil:

There was insufficient sample volume to do the TTLC PCB analysis on sample SOL-1@9' (199469-001). No analytical problems were encountered.

<u>Polychlorinated Biphenyls (PCBs) (EPA 8082) WET Leachate:</u>
No analytical problems were encountered.

199603

CHAIN OF CUSTODY

PL-100721-027

Ref. Document #

Analyses Requested a 16-5(era anter)

.. (20109) stions) (azios Aga) snilossg-HT

Enlors- NO3, CL, SO4 (598.0)

Cooler Femperature

STEX & Naphthalene (EPA 8260B)

Quest Ague E. 4 32 Curtis & Tompkins, 2323 Fith St. Lub Destination: Berkeley, CA 94710

Nay 29th 200

Shipment Date: Purchase Order #:

619-533-7330/ 619-239-1238

Project Manager: Chris Corey

Shaw Environmental and Infrastructure Inc.

1230 Columbia St., Suite 1200

San Diego, CA 92101

Waybill Number:

Project Name: Point Loma ACO-001

Project Number: 100721

Project Location: GW Monitoring

510-204-2225

Address: 4005 Port Chicago Hwy

Phone/Fax Number: 925-288-2151

Send Report To: Rose Condit

City: Concord, CA, 94520

FedEX# 1114-4580-0

Lab Contact Name / ph. #: Anne Kathain

Beginning Method Collection Information

Depth (ft) Materix

ersnirinos to #

Preservative (water) Container Type

Ending Depti

3-VOA

2-VOA 盟 ΗCI

<u>5</u>

1-9500 2-Liter 1-500 1-2503 Amber ml Poly ml Poly g HNO,

33

X

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1- 500 ml Poly 35 X X 24 1 X

X 24

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11/29/07 11/29/07

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Sample ID

DWW-ON

Time

Date

Locution ID

Sampler's Name(s): Bill Rice

PS G

076

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GW GW

009 SO SO

11/29/07

11/29/07 11/29/07

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Frankley 201120 1041 WYD 200111201

GW

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11/29/07

HAMMEN - O

Thumson Zeoth 2-4 Common 2007 II 74

Method Codes

C = Composite

23

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24

X

X

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GW BW

O

120

M G = Grab

SO =Soil

BW= Blank Water

DW = Drinking Water GW ≈ Ground Water WW = Waste Water

Date: 12-5-0 00

Project Specific:

H

* List of Cations - Fe, Na, K, Mn, Mg, Ca, Al

Level 2 Report

special Instructions: Temp Blank

C 24-hr ,□ 72-hr

Level Of QC Required:

Date: 11/24/07

□ 5-day □ 48-hr

Standard TAT -10day

clinquished By:

Turnaround Time:

Time: 1723

Date: Time:

BW

11/29/07

11/29/07

場合の

TRIP

Time: Dafe: Time:

Marrix Codes

WP=Waste Product

SOP Votume

Client Services

Section

112

Page

Loft

Effective Date

08-Aug-07

Revision Filename 3 Number 1 of 3 F:\QC\Forms\QC\Cooler.wpd

COOLER RECEIPT CHECKLIST

Curlis & Tompkins, Ltd.

Lo	gin#: 199603 Date Received: 12-3-07 Number of Coolers: 3
Cfi	ent: Shaw Project: Point Lorg ACD-001
	, on the medical management of
Α.	Preliminary Examination Phase
	Date Opened: 12-3-07 By (print): Faith Alichds (sign)
	Did cooler come with a shipping slip (airbill, etc.)? (YES)NO
	If YES, enter carrier name and airbill number: FOO Ex 8627 9848 6472
2.	Were custody seals on outside of cooler? YES NO
	How many and where? Seal date: Seal name:
3.	Were custody seals unbroken and intact at the date and time of arrival?
4	Were custody papers dry and intact when received?
5.	Were custody papers filled out properly (ink, signed, etc.)? YES NO
6.	Did you sign the custody papers in the appropriate place?
7.	Was project identifiable from custody papers?
	If YES, enter project name at the top of this form.
8.	Describe type of packing in cooler: Bubble wrap Ziploc brys
9.	if required, was sufficient ice used? Samples should be <=6 degrees C (YES) NO
1.0	Type of ice: Welt Temperature: 3°C 10.5°C 2.5°C Were Encore sampling devices present in the cooler? YES NO
10.	Were Encore sampling devices present in the cooler? YESNO
	If YES, enter time they were transferred to the freezer
D	
B.	Login Phase Date Logged In: 19-3-57 By (print): Fortla Alabak, (circulation)
1.	
2.	Did all bottles arrive unbroken? YES NO
3.	Were labels in good condition and complete (ID, date, time, signature, etc.)?YES NO
3. 4	Did bottle labels agree with custody papers? Were appropriate to the custody papers?
5.	Were appropriate containers used for the tests indicated? YES NO
5. 6	Were correct preservatives added to samples? YES NO
7.	Was sufficient amount of sample sent for tests indicated? YES NO
	Were bubbles absent in VOA samples? If NO, list sample ids belowYES NO
₿.	Was the client contacted concerning this sample delivery? YES NO
	If YES, give details below.
	Who was called? By whom? Date:
A ನನ:*:	onal Comments:
Kudit	onal Comments:
e la	Malyze Norvale post hald - per NF - AMIL 12/03/07
) Ph	U CARRY WAR KOMMINED AND IN LEAVE HOLD TO LOS LOS LOS LOS LOS LOS LOS LOS LOS LO
	TOO OF TOME INTO THE WAY TOO THE WAY TOO THE WAY TO THE
N.	I would sample continued were in the cooler that was
6 00d	
CU	states that each sample has II bottles; only 10 came in
C DO	er; Sample FNWMW07 20071179 Mas 11 containers



Polychlorianied Lippenyis (PCEs)

Lab #: 199469 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: 270025 Analysis: EPA 8082 Matrix: Soil Sampled: 11/26/07 Units: ug/Kg Received: 11/26/07 Basis: as received Prepared: 11/29/07 Batch#: 132185

Field ID:

SOL-2@9'

Type:

SAMPLE

Lab ID:

199469-002

Diln Fac:

2.000

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	16	::::::::::::::::::::::::::::::::::::::
Aroclor-1221	ND	33	
Aroclor-1232	ND	16	
Aroclor-1242	ND	16	1
Aroclor-1248	ND	16	
Aroclor-1254	1,100	16	· ·
Aroclor-1260	1,300	16	

Surrogate	%REC	C himits	
TCMX	73	66-140	
Decachlorobiphenyl	80	51-152	ł

Field ID:

SOL-3@3'

Type: Lab ID:

SAMPLE 199469-003

Diln Fac:

1.000

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	LI	33833
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	E .
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	i
Aroclor-1248	ND	12	j
Aroclor-1254	760	12	
Aroclor-1260	560	12	1

		%REC	C Limits	
ı	TCMX	85	66-140	
į	Decachlorobiphenyl	83	51-152	

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Page 1 of 5

Polychlozinaded Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Lab #: 199469 Client: EPA 3550B Questa Engineering Corporation Prep: Project#: 270025 Analysis: EPA 8082 11/26/07 Matrix: Soil Sampled: Units: 11/26/07 ug/Kg Received: Basis: as received 11/29/07 Prepared: Batch#: 132185

Field ID:

SOL-4@3'

Type:

SAMPLE

Lab ID:

Aroclor-1260

199469-004

Diln Fac:

17

11/30/07

2,000

Analyzed:

65A

leanup Method: EPA	366
--------------------	-----

Analyte	Result	RL	
Aroclor-1016	ND	1.7	
Aroclor-1221	ND	33	
Aroclor-1232	ND	17	
Aroclor-1242	ND	17	
Aroclor-1248	ND	17	
Aroclor-1254	1,100	17	

Surrogate	%REC	Limics	
TCMX	76	66-140	
Decachlorobiphenyl	70	51-152	

980

Field ID:

SOL-5@9.5'

Гуре: Lab ID: SAMPLE

199469-005

Diln Fac:

1.000

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	RL.	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	}
Aroclor-1242	ND	12	
Aroclor-1248	ND	. 12	Į
Aroclor-1254	85	12	
Aroclor-1260	90	12	

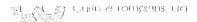
Surrogata	%REC	Limits	
TCMX	87	66-140	
Decachlorobiphenyl	74	51-152	

DO= Diluted Out

ND= Not Detected

L= Reporting Limit

ge 2 of 5



Polycularinated Riphenyls (PCDs) Lab #: 199469 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: 270025 Analysis: EPA 8082 Matrix: Soil Sampled: 11/26/07 Units: ug/Kg Received: 11/26/07 Basis: as received Prepared: 11/29/07 Batch#: 132185

Field ID:

SOL-6@4.5'

Type: Lab ID:

SAMPLE

199469-006

Diln Fac:

1.000

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	240	12	
Aroclor-1260	370	12	4

		%REC	Limits	
	TCMX	96	66-140	
L	Decachlorobiphenyl	80	51-152	

Field ID:

SOL-7@7'

Type: Lab ID: SAMPLE

199469-007

Diln Fac:

1.000

Analyzed:

12/01/07

Cleanup Method: EPA 3665A

Analyte Aroclor-1016	Result	RL	
Aroclor-1221	ND ND	12	
Aroclor-1232	ND	24 12	
Aroclor-1242	ND	12	1
Aroclor-1248	ND	12	
Aroclor-1254	250	12	
Aroclor-1260	190	12	

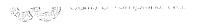
Surrogate	%REC	Limits	
TCMX	84	66-140	
Decachlorobiphenyl	75	51-152	

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Page 3 of 5



Polychlorinated Dipheryls (PCBs)

Lab #: 199469 Location: Former Larkspur Treatment Plant Client:

Questa Engineering Corporation Prep: EPA 3550B Project#: 270025 Analysis: EPA 8082

Matrix: Soil 11/26/07 Sampled: Units: ug/Kg Received: 11/26/07 Basis: as received 11/29/07 Prepared:

Batch#: 132185

Field ID:

SOL-8@3'

Type: Lab ID: SAMPLE

199469-008

Diln Fac:

2.000

Analyzed:

12/01/07

Cleanup Method: EPA 3665A

Analyta	Result	RL	
Aroclor-1016	ND	17	
Aroclor-1221	ND	33	
Aroclor-1232	ND	17	
Aroclor-1242	ND	17	
Aroclor-1248	ND	17	
Aroclor-1254	730	17	
Aroclor-1260	760	17	

Surrogače	%REC	Limits	
TCMX	87	66-140	-
Decachlorobiphenyl	96	51-152	

Field ID:

SOL-9@3'

Гуре: Lab ID: SAMPLE

199469-009

Diln Fac:

20.00

Analyzed:

12/03/07

Cleanup Method: EPA 3665A

Analyte	Result	Rfi	
Aroclor-1016	ND	170	
Aroclor-1221	ND	330	
Aroclor-1232	ND	170	
Aroclor-1242	ND	170	
Aroclor-1248	ND	170	
Aroclor-1254	8,400	170	
Aroclor-1260	14,000	170	

Surrogate	%RE	C Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-152

_O= Diluted Out

ND= Not Detected

L= Reporting Limit

ge 4 of 5



		Polychlariced	Diphenyl	s (PCDa)	
Lab #:	199469	The second secon	Location:	Former Larkspur Treatm	ment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B	
Project#:	270025		Analysis:	EPA 8082	
Matrix:		Soil	Sampled:	11/26/07	
Units:		ug/Kg	Received:	11/26/07	
Basis:		as received	Prepared:	11/29/07	'
Batch#:		132185			

BLANK

Type: Lab ID:

QC417314

Diln Fac:

1.000

Analyzed: 11/29/07

Cleanup Method: EPA 3665A

Analyte	Result	77.7	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	1.2	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	1
Aroclor-1260	ND	12	

Surrogate	%REC	Limite	
TCMX	97	66-140	
Decachlorobiphenyl	112	51-152	I

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

Page 5 of 5

		Folychlorinatad		
Lab #:	199469		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC417315	Batch#:	132185
Matrix:		Soil	Prepared:	11/29/07
Units:		ug/Kg	Analyzed:	11/29/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.5	195.0	118	69-142
Aroclor-1260	165.5	157.7	95	69-155

Surrogate	%REC	Limits	į
TCMX	96	66-140	ĺ
Decachlorobiphenyl	102	51-152	İ



	Polyablozinatad	Bipheny'	La (PCBa)
Lab #: 19946	9	Location:	Former Larkspur Treatment Plant
Client: Quest	a Engineering Corporation	Prep:	EPA 3550B
Project#: 27002	5	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZ	Batch#:	· 132185
MSS Lab ID:	199526-001	Sampled:	11/28/07
Matrix:	Soil	Received:	11/28/07
Units:	ug/Kg	Prepared:	11/29/07
Basis:	as received	Analyzed:	11/30/07
Diln Fac:	1.000		

Type:

MS

Lab ID:

QC417316

Cleanup Method: EPA 3665A

Analyta	MSS Result	Splked	Result	%REC	Limits
Aroclor-1016	<2.874	165.8	188.0	113	62-139
Aroclor-1260	21.67	165.8	163.8	. 86	54-143

Surrogate	%REC	Limits	
TCMX	95	66-140	
Decachlorobiphenyl	96	51-152	

Type:

MSD

Lab ID:

QC417317

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.9	189.8	114	62-139	1	33
Aroclor-1260	165.9	175.1	92	54-143	7	34

Surrogate	%REC	Limits	
TCMX	101	66-140	
Decachlorobiphenyl	109	51-152	1

		Polyeklori:	isted Bipheryl.	s (FUBs)	
1, .	199469		Location:	Former Larkspur	Treatment Plant
Client:	Questa Engine	ering Corporation	Prep:	EPA 3520C	j
Project#:	270025		Analysis:	EPA 8082	
Units:	ug/L		Sampled:	11/26/07	Tomas and the second of the se
Diln Fac:	1.000		Received:	11/26/07	
Batch#:	132234		Prepared:	11/29/07	

Field ID: Type: Lab ID:

SOL-1@9' SAMPLE

199469-001

Matrix:

WET Leachate

Analyzed:

Analyzed: 12/01/07 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	-
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0,50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%RE	C Limits	
TCMX	78	54-128	
Decachlorobiphenyl	68	25-122	· ·

Field ID:

SOL-2@9'

Type: Lab ID:

SAMPLE 199469-002

Matrix: WET Leachate
Analyzed: 12/01/07
Cleanup Method: EPA 3665A

Anglyte	Poetij ÷	DT	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	away a
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	:
Aroclor-1254	ND	0.50	1
Aroclor-1260	ND	0,50	

Surrogațe	%REC	Limits	
TCMX	81	54-128	
Decachlorobiphenv1	69	25-122	

Field ID:

SOL-3@3'

'ype: .ab ID:

SAMPLE

199469-003

Matrix:

Analyzed:

WET Leachate

12/01/07 Cleanup Method: EPA 3665A

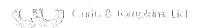
Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	1
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	1
Aroclor-1254	ND	0,50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits	
TCMX	77	54-128	
Decachlorobiphenyl	76	25-122	

ND= Not Detected

L= Reporting Limit

ge 1 of 4



		plychlorinated	Biphenyl	a (£C£	ਡ)			
	199469	And the control of th	Location:	Former	Larkspur	Treatment	Plant	1
Client:	Questa Engineering (Corporation		EPA 352				1
Project#:	270025		Analysis:					1
Units:	ug/L		Sampled:		11/26/07		W	
Diln Fac:	1.000		Received:		11/26/07			
Batch#:	132234	Principle (CH-n) (CH-N) (All All All All Announcement (All All All All Announcement (All All All All All All Announcement (All All All All All All Announcement (All All All All All All All All All Al	Prepared:		11/29/07		·	

Field ID: Type: Lab ID:

SOL-4@3' SAMPLE 199469-004 Matrix: Analyzed: Cleanup Method:

WET Leachate 12/01/07 EPA 3665A

Analyte	Result	RI	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	•
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	ı
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits	
TCMX	82	54-128	
Decachlorobiphenyl	76	25-122	

Field ID: Type: Lab ID:

SOL-5@9.5' SAMPLE 199469-005 Matrix:

WET Leachate Analyzed: 12/01/07 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	***************************************
Aroclor-1221	ND	1.0	'
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	ŀ
Aroclor-1260	ND	0.50	

Surrogate	%RE(3 Limits		
TCMX	85	54-128		
<u> Decachlorobiphenyl</u>	61	25-122		·

Field ID: Type: Lab ID:

SOL-6@4.5' SAMPLE 199469-006 Matrix:

WET Leachate Analyzed: 12/01/07 Cleanup Method: EPA 3665A

Analyte	Result	RD.	
Aroclor-1016	ND	0,50	20000000
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	1
Aroclor-1242	ND	0.50	l
Aroclor-1248	ND	0,50	1
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	80	54-128
Decachlorobiphenyl	59	25-122

ND= Not Detected RL= Reporting Limit

Page 2 of 4

2.

) 2	Polyshlorinaced					
	199469			Location:	Former	Larkspur	Treatment	Plant
Client:	Questa	Engineering	Corporation		EPA 352			1
Project#:	270025		4.	Analysis:	EPA 808	32		
Units:		ug/L		Sampled:		11/26/07		
Diln Fac:		1.000		Received:		11/26/07		
Batch#:		132234		Prepared:		11/29/07		

Field ID: Type: Lab ID:

SOL-7@7' SAMPLE 199469-007 Matrix: Analyzed:

WET Leachate 12/01/07 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0,50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%RE	C Limits	
TCMX	83	54-128	
Decachlorobiphenyl	78	25-122	

Field ID:

Type: Lab ID:

SOL-8@3'

WET Leachate

SAMPLE 199469-008 matrix:
Analyzed: Cleanup Method: EPA 3665A

12/01/07

Analyta	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0,50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits			
TCMX	87	54-128	,		
Decachlorobiphenyl	78	25-122			

Field ID:

'ype: ab ID:

SOL-9@3' SAMPLE

199469-009

Matrix:

Analyzed: Cleanup Method: EPA 3665A

WET Leachate 12/01/07

Analyte Aroclor-1016 Result ND 0.50 Aroclor-1221 ND 1.0 Aroclor-1232 ND0.50 Aroclor-1242 0.50 ND Aroclor-1248 ND 0.50 Aroclor-1254 Aroclor-1260 ND 0.50 ND 0.50

Surrogate	%RI	EC Limits	
TCMX	79	54-128	7
<u>Decachlorobiphenyl</u>	62	25-122	

ND= Not Detected

5= Reporting Limit

ge 3 of 4



		å	Polychlorine kad	Biphangl	s (PCE)g)		
	199469			Location:	Former	Larkspur	Treatment	Plant .
Client:	Questa	Engineering	Corporation	Prep:	EPA 352	20C ~		
Project#:	270025			Analysis:	EPA 808	32		}
Units:		ug/L	The second secon	Sampled:	,	11/26/07		
Diln Fac:		1.000		Received:		11/26/07		
Batch#:		132234		Prepared:		11/29/07		

Type: Lab ID:

BLANK

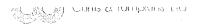
QC417507 Water

Analyzed: 11/30/07 Cleanup Method: EPA 3665A

Mace.	Matrix:	Water
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Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	-
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

J 3 1 1 1 7 7		
	1	
Decachioropiphenyl 55 25-122		Decachlorobiphenyl 55 25-122



Polychlorinaced Bipheryls (PCBs) Lab #: 199469 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3520C Project#: 270025 Analysis: EPA 8082 Matrix: Water Batch#: 132234 Units: ug/L Prepared: 11/29/07 Diln Fac: 1:000

Туре:

BS

Lab ID:

OC417508

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Spiked	Resul, t	%REC	: Limits
Aroclor-1016	5,000	4.859	97	71-140
Aroclor-1260	5.000	5.076	102	68-150

Surrogate	%REC	Limits
TCMX	94	54-128
Decachlorobiphenyl	55	25-122

Type:

Lab ID:

BSD

QC417509

Analyzed: 12/01/07

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%RE	C Limits	RPI	Lim
Aroclor-1016	5.000	4.484	90	71-140	8	21
Aroclor-1260	5.000	4.683	94	68-150	8	27

Surrogate	%REC	Limits	
TCMX	85	54-128	
Decachlorobiphenyl	69	25-122	



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Firm Street, Barkeley, CA 2471O, Phone (510) 485-0900

Laboratory Job Number 199188 ANALYTICAL REPORT

Questa Engineering Corporation Project

1220 Brickyard Cove Road

Point Richmond, CA 94801

: 270025 Location : Former Larkspur Treatment Plant

Level : II

Sample ID SWALE

Lab ID 199188-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results ontained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Date: <u>11/16/2007</u>

Lignature:

Operations Manager

Date: <u>11/19/2007</u>

ELAP # 01107CA

Page 1 of



CASE NARRATIVE

Laboratory number:

199188

Client:

Questa Engineering Corporation

Project:

270025

Location:

Former Larkspur Treatment Plant

Request Date:

11/12/07

Samples Received:

11/12/07

This hardcopy data package contains sample and QC results for one soil sample, requested for the above referenced project on 11/12/07. The sample was received on ice and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Matrix spikes were not reported for this analysis because the parent sample required a dilution that would have diluted out the spikes. No analytical problems were encountered.

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Client Request Login Review

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Duedate	11/16								
Analysis	PCB								
Add/Cancel	Add					,			
Matrix	Soil								
Client ID	SWALE								
Previous Lab ID	199176-001								
Current Lab ID	199188-001								

DATE / TIME DATE / TIME 5 Analysis RECEIVED BY: 5,200 21218 DATE / TIME A DATE / TIME DATE / TIME YOUSOUND WITCO QNESTA SNANEERING Preservative ICE xata *ONH *OS*H Sampler: Mare Feliciparo RELINQUISHED BY: 199 176 HCF 2366114 Report To: WILL WORKINS んな Containers jo Wa S) Matrix Waste C&TLOGIN# Water Company: Telephone: lios ☐ Yes ☐ No ☐ N/A Mon Ice Ambient Sampling Date Time 12/07 Preservative Correct? 11/12/07 SAMPLE RECEIPT Eax: Minjack Cold (rate) STA PER Wiley Dan Ball Curtis & Tompkins, Ltd. Analytical Laboratory Since 1878 270097 (510) 486-0900 Phone (510) 486-0532 Fax Sample ID. Berkeley, CA 94710 2323 Fifth Street (Project Name: AvSV 0 083 C Turnaround Time: からか Project No.: Project P.O.: Notes: 7 ę ś ī



Polychlorinated Biphenyls (PCBs)

Location: Former Larkspur Treatment Plant Lab #: 199188 Client: Questa Engineering Corporation EPA 3550B Project#: 270025 Analysis: EPA 8082 Field ID: SWALE Batch#: 131734 Matrix: Soil Sampled: 11/12/07 Units: ug/Kg Received: 11/12/07 Basis: as received 11/14/07 Prepared: Diln Fac: 1.000 Analyzed: 11/15/07

Type: Lab ID: SAMPLE

199188-001

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	, ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	450	12	
Aroclor-1260	650	12	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	88	51-152

Гуре: Lab ID: BLANK

QC415437

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate		Limits
TCMX	101	66-140
Decachlorobiphenyl	88	51-152

ND= Not Detected

L= Reporting Limit

ge 1 of 1

		Polychlorinated	Biphenyl	s (PCBs)
1	199188		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC415438	Batch#:	131734
Matrix:		Soil	Prepared:	11/14/07
Units:		ug/Kg	Analyzed:	11/15/07
Basis:		as received		22/20/01

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.2	133.9	81	69-142
Aroclor-1260	166.2	167.4	101	69-155

***************************************	rrogate	%RE	C Limits	
TCMX		95	66-140	
Decachlorobi	phenyl	90	51-152	· ·



CASE NARRATIVE

Laboratory number:

199470

Client:

Questa Engineering Corporation

Project:

270025

Location:

Former Larkspur Treatment Plant

Request Date:

11/26/07

Samples Received:

11/26/07

This hardcopy data package contains sample and QC results for six soil samples, requested for the above referenced project on 11/26/07. The samples were received intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: Prep: EPA 3550 Analysis: EPA 8082 Client: Questa Engineering Corporation Project#: Matrix: <u>2</u>70025 132185 Batch#: ug/Kg 11/26/07 Units: Sampled: as réceived 11/26/07 11/29/07 Basis: Received: Diln Fac: 1.000 Prepared:

Field ID:

SW-2-SURFACE

SAMPLE

Type: Lab ID:

199470-001

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	$\bar{1}\bar{2}$	
Aroclor-1248	ND	$\overline{12}$	
Aroclor-1254	1.3	12	
Aroclor-1260	12	$\bar{1}\bar{2}$	

Surrogate	%REC	Limits
TCMX	90	66-140
Decachlorobiphenyl	85	51-152

Field ID:

SW-3-SURFACE

SAMPLE

Type: Lab ID:

199470-002

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

12

Analyte Result Aroclor-1016 12 Aroclor-1221 24 ND 12 12 12 Aroclor-1232 ND Aroclor-1242 ND Aroclor-1248 Aroclor-1254 ND 12 27

Surrogate	%REC	Limits		
TCMX	89	66-140		
Decachlorobiphenvl	92	51-152		

Field ID:

Aroclor-1260

SW-4-SURFACE

Analyzed:

11/30/07

Type: Lāb ID: SAMPLE 199470-003 Cleanup Method: EPA 3665A

Analyte RL Result 12 24 Aroclor-1016 ND Aroclor-1221 ND Aroclor-1232 ND 12 Aroclor-1242 12 12 ND Aroclor-1248 ND Aroclor-1254 Aroclor-1260 12 390 420

Surrogate	%REC	Limits		
TCMX	93	66-140		
Decachlorobiphenyl	87	51-152		

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	l Biphenyls (PCBs)
	199470 Questa Engineerin	g Corporation	Location: Former Larkspur Treatment Plant Prep: EPA 3550B
Project#:			Analysis: EPA 8082
Matrix:	Soil		Batch#: 132185 Sampled: 11/26/07
Units: Basis:	ug/Kg as receive	d.	Sampled: 11/26/07 Received: 11/26/07
Diln Fac:	1.000	u	Prepared: 11/29/07

Field ID:

SW-5-SURFACE

SAMPLE 199470-004

Type: Lab ID:

Analyzed: 11/30/07 Cleanup Method: EPA 3665A

Analyte	Result	RI.	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	97	66-140	
Decachlorobiphenyl	93	51-152	

Field ID:

Type: Lab ID:

SW-6-SURFACE SAMPLE 199470-005

Analyzed: 11/30/07 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	•
Aroclor-1248	ND .	12	
Aroclor-1254	50	12	
Aroclor-1260	51	12	

Surrogate	%REC	Limits	
TCMX	96	66-140	
Decachlorobiphenyl	82	51-152	

Field ID:

SW-7-SURFACE

Type: Lab ID:

SAMPLE 199470-006

Analyzed:

11/30/07

Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	36	12	
Aroclor-1260	56	12	

Surrogate	%REC	Limits	
TCMX	94	66-140	
Decachlorobiphenyl	91	51-152	

ND= Not Detected RL= Reporting Limit

Page 2 of 3



	Polychlorinated	Biphenyls (PCBs)
Lab #: 199470 Client: Questa Project#: 270025	Engineering Corporation	Location: Former Larkspur Treatment Plant Prep: EPA 3550B Analysis: EPA 8082
Matrix: Units: Basis: Diln Fac:	Soil ug/Kg as received 1.000	Batch#: 132185 Sampled: 11/26/07 Received: 11/26/07 Prepared: 11/29/07

Type: Lab ID:

BLANK QC417314

· Analyzed: 11/29/07 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor 1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	Ĩ 2	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	112	51-152



		Polychlorinated	Biphenyl	ls (PCBs)
Lab #:	199470		Location:	Former Larkspur Treatment Plant
Client:	Questa Engi	ineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC41	17315	Batch#:	132185
Matrix:	Soil	Į	Prepared:	11/29/07
Units:	ug/k		Analyzed:	the second second
Basis:	as t	received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.5	195.0	118	69-142
Aroclor-1260	165.5	157.7	95	69-155

Surrogate	%REC	Limits	
TCMX	96	66-140	
Decachlorobiphenyl	102	51-152	



		Polychlorinated	Biphenyl	.s (PCBs)
Lab #:	199470		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Field ID:		222222222	Batch#:	132185
MSS Lab ID):	199526-001	Sampled:	11/28/07
Matrix:		Soil	Received:	11/28/07
Units:		ug/Kg .	Prepared:	11/29/07
Basis:		as received	Analyzed:	11/30/07
Diln Fac:		1.000		

Type:

Cleanup Method: EPA 3665A

Lab ID:

MS QC417316

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.874	165.8	188.0	113	62-139
Aroclor-1260	21.67	165.8	163.8	86	54-143

Surrogate	%REC	Limits	
TCMX	95	66-140	
Decachlorobiphenyl	96	51-152	

Type:

MSD

Lab ID:

QC417317

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.9	189.8	114	62-139	1	33
Aroclor-1260	165.9	175.1	92	54-143	7	34

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	109	51-152



	Total Extractable Hydrocarbons						
Lab #:	194786	Location: Former Larkspur Treatment Plant					
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE					
Project#:	STANDARD	Analysis: EPA 8015B					
Matrix:	Soil	Sampled: 05/14/07					
Units:	mg/Kg	Received: 05/14/07					
Basis:	as received	Prepared: 05/15/07					
Batch#:	125204	Analyzed: 05/16/07					

Analyte	Result	RL	
Diesel C10-C24	15 н q	1.0	
Motor Oil C24-C36	31 L q	5.0	

Surrogate	%REC	Limits
Hexacosane	108 q	40-127

Analyte	Result	RL	
Diesel C10-C24	14 H q	1.0	
Motor Oil C24-C36	31 L q	5.0	

Surrogate	%REC	Limits
Hexacosane	109 q	40-127

Analyte	Result	RL	
Diesel C10-C24	8.7 Н ф	1.0	
Motor Oil C24-C36	44 L q	5.0	

Surrogate	%REC	Limits
Hexacosane	92 q	40-127

- H= Heavier hydrocarbons contributed to the quantitation
- L= Lighter hydrocarbons contributed to the quantitation
- Y= Sample exhibits chromatographic pattern which does not resemble standard
- q= Draft result ending instrument QC not yet analyzed
- ND= Not Detected
- RL= Reporting Limit

Page 1 of 2



Total Extractable Hydrocarbons				
Lab #:	194786	Location: Former Larkspur Treatment Plant		
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE		
Project#:	STANDARD	Analysis: EPA 8015B		
Matrix:	Soil	Sampled: 05/14/07		
Units:	mg/Kg	Received: 05/14/07		
Basis:	as received	Prepared: 05/15/07		
Batch#:	125204	Analyzed: 05/16/07		

Analyte	Result	RL	
Diesel C10-C24	410 ну q	5.0	
Motor Oil C24-C36	1,100 L q	25	

Surrogate	%REC	Limits	
Hexacosane	105 q	40-127	

Field ID: 15B@2.0' Lab ID: 194786-010 Type: SAMPLE Diln Fac: 5.000

Analyte	Result	RL	
Diesel C10-C24	99 Н Ү q	5.0	
Motor Oil C24-C36	400 L q	25	

Surrogate	%REC	Limits
Hexacosane	96 q	40-127

Type: BLANK Diln Fac: 1.000

Lab ID: QC387830

Analyte	Result	RL	
Diesel C10-C24	ND q	1.0	
Motor Oil C24-C36	ND q	5.0	

Surrogate	%REC	Limits
Hexacosane	93 q	40-127

- H= Heavier hydrocarbons contributed to the quantitation
- L= Lighter hydrocarbons contributed to the quantitation
- Y= Sample exhibits chromatographic pattern which does not resemble standard
- $\mathbf{q}\text{=}\ \mathsf{Draft}\ \mathsf{result}\ \text{-}\ \mathsf{ending}\ \mathsf{instrument}\ \mathsf{QC}\ \mathsf{not}\ \mathsf{yet}\ \mathsf{analyzed}$
- ND= Not Detected
- RL= Reporting Limit

Page 2 of 2



	Total Extrac	table Hydrocarbons	
Lab #:	194786	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE	
Project#:	STANDARD	Analysis: EPA 8015B	
Type:	LCS	Diln Fac: 1.000	
Lab ID:	QC387831	Batch#: 125204	
Matrix:	Soil	Prepared: 05/15/07	
Units:	mg/Kg	Analyzed: 05/15/07	
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.93	43.26	87	58-127

Surrogate	%REC	Limits
Hexacosane	101	40-127

Page 1 of 1 3.0



Total Extractable Hydrocarbons						
Lab #: 194786	5	Location: Fo	ormer Larkspur Treatment Plant			
Client: Questa	a Engineering Corporation	Prep: SI	HAKER TABLE			
Project#: STANDA	ARD	Analysis: El	PA 8015B			
Field ID:	ZZZZZZZZZ	Batch#:	125204			
MSS Lab ID:	194647-009	Sampled:	05/07/07			
Matrix:	Soil	Received:	05/08/07			
Units:	mg/Kg	Prepared:	05/15/07			
Basis:	as received	Analyzed:	05/15/07			
Diln Fac:	1.000					

Type: MS Cleanup Method: EPA 3630C

Lab ID: QC387832

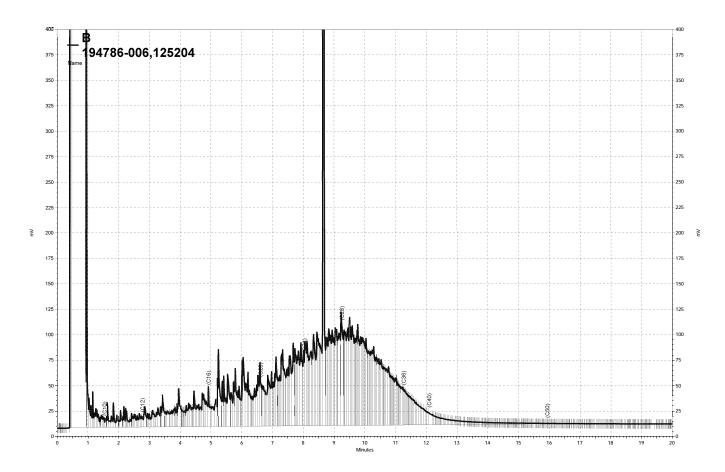
Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	9.271	49.93	52.27	86	29-147

Surrogate	%REC	Limits
Hexacosane	90	40-127

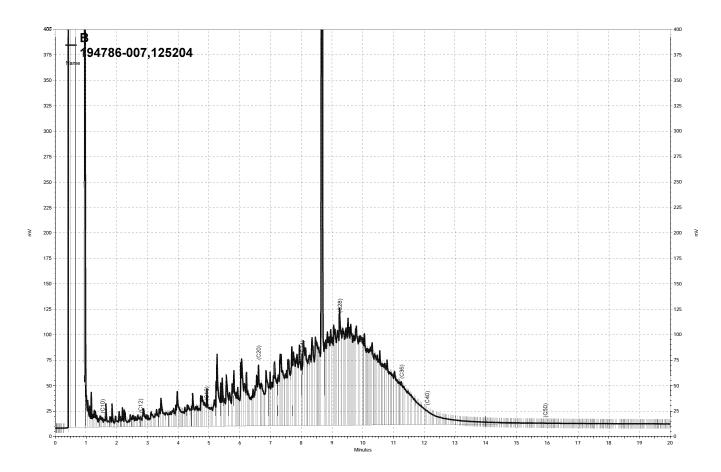
Type: MSD Cleanup Method: EPA 3630C

Lab ID: QC387833

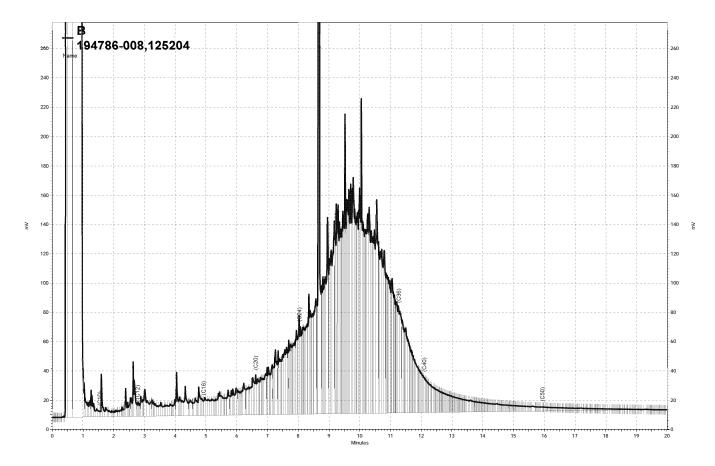
Analyte	Spiked	Result	%REC	Limits	RPD :	Lim
Diesel C10-C24	49.93	56.00	94	29-147	7	46



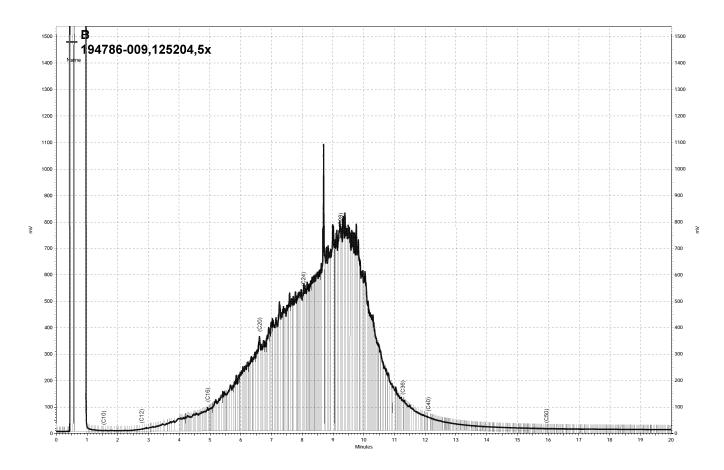
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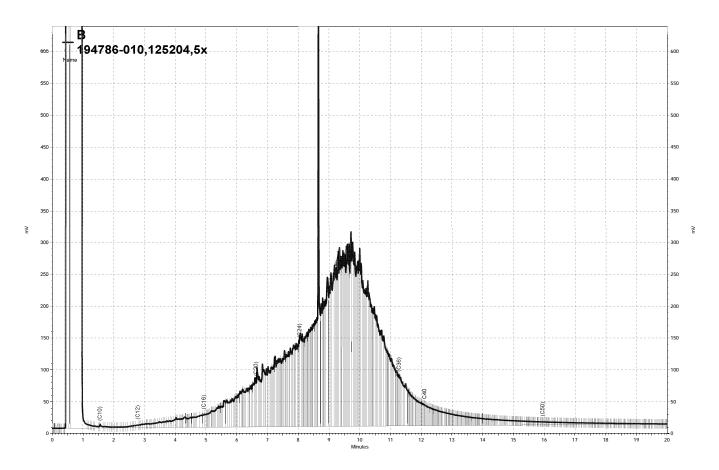
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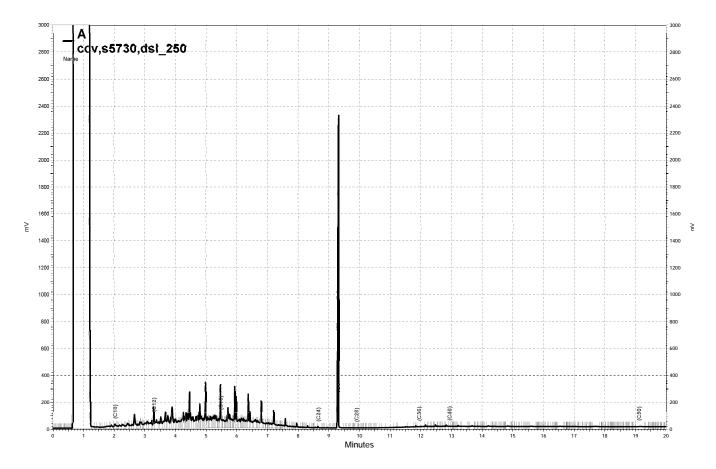
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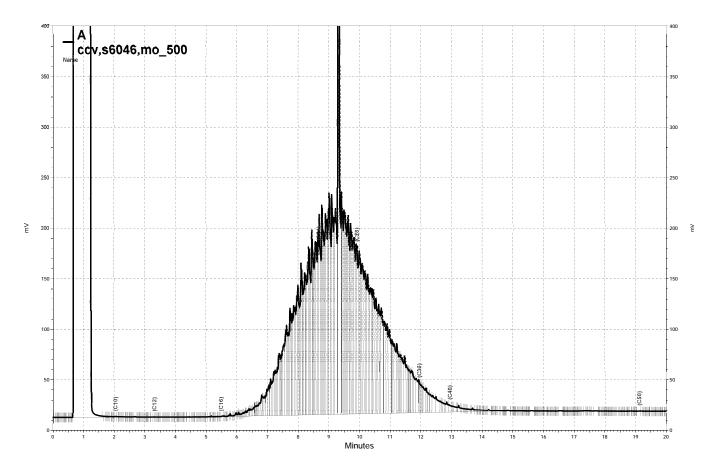
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Polychlorinated Biphenyls (PCBs) Lab #: 194786 Location: Former Larkspur Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: <u> Analysis:</u> EPA 8082 Project#: STANDARD Sampled: Soil 05/14/07 Matrix: Received: 05/14/07 Units: ug/Kg Basis: as received Prepared: 05/15/07 125199 Batch#:

Field ID: K1S@2.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/15/07
Lab ID: 194786-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	85	63-141
Decachlorobiphenyl	79	50-158

Field ID: K2N@2.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/15/07
Lab ID: 194786-002 Cleanup Method: EPA 3665A

Analyte	Result	RT.	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	100	12	
Aroclor-1260	94	1.2	

Surrogate	%REC	Limits
TCMX	105	63-141
Decachlorobiphenyl	101	50-158

 Field ID:
 K3E@2.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/15/07

 Lab ID:
 194786-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	180	12	
Aroclor-1260	100	12	

TCMX 104	63-141
Decachlorobiphenyl 93	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 194786 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Soil Matrix: 05/14/07 Received: Units: ug/Kg 05/14/07 as received 125199 Basis: Prepared: 05/15/07 Batch#:

Field ID: K4W@2.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/15/07
Lab ID: 194786-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	13	12	
Aroclor-1260	16	12	

Surrogate	%REC	Limits
TCMX	89	63-141
Decachlorobiphenyl	83	50-158

Field ID: K5B@5.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/15/07
Lab ID: 194786-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	96	12	
Aroclor-1260	100	12	

Surrogate	%REC	Limits
TCMX	91	63-141
Decachlorobiphenyl	81	50-158

 Field ID:
 H1N@2.0'
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 05/16/07

 Lab ID:
 194786-011
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	48	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	1,300	24	
Aroclor-1260	1,300	24	

Surrogate	%REC	Limits
TCMX	120	63-141
Decachlorobiphenyl	114	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 194786 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Soil Matrix: 05/14/07 Received: Units: ug/Kg 05/14/07 as received 125199 Basis: Prepared: 05/15/07 Batch#:

Field ID: H2S@2.0' Diln Fac: 5.000
Type: SAMPLE Analyzed: 05/16/07
Lab ID: 194786-012 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	60	
Aroclor-1221	ND	120	
Aroclor-1232	ND	60	
Aroclor-1242	ND	60	
Aroclor-1248	ND	60	
Aroclor-1254	2,100	60	
Aroclor-1260	2,100	60	

Surrogate	%REC	Limits
TCMX	100	63-141
Decachlorobiphenyl	109	50-158

Field ID: H3E@2.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/16/07
Lab ID: 194786-013 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	480	12	
Aroclor-1260	460	12	

Surrogate	%REC	Limits
TCMX	97	63-141
Decachlorobiphenyl	92	50-158

 Field ID:
 H4W@2.0'
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 05/16/07

 Lab ID:
 194786-014
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	47	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	1,300	24	
Aroclor-1260	1,400	24	

Surrogate	%REC	Limits
TCMX	107	63-141
Decachlorobiphenyl	109	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 194786 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Soil 05/14/07 Matrix: Received: Units: ug/Kg 05/14/07 as received 125199 Basis: Prepared: 05/15/07 Batch#:

Field ID: H5B@4.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/16/07
Lab ID: 194786-015 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	103	63-141
Decachlorobiphenyl	103	50-158

 Field ID:
 J1N@2.5'
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 05/16/07

 Lab ID:
 194786-016
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	47	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	840	24	
Aroclor-1260	1,200	24	

Surrogate	%REC	Limits
TCMX	102	63-141
Decachlorobiphenyl	102	50-158

 Field ID:
 J2S@2.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/16/07

 Lab ID:
 194786-017
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	120	12	
Aroclor-1260	150	12	

Surrogate	%REC	Limits	
TCMX	107	63-141	
Decachlorobiphenyl	102	50-158	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 194786 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Soil Matrix: 05/14/07 Received: Units: ug/Kg 05/14/07 as received 125199 Basis: Prepared: 05/15/07 Batch#:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	57	12	
Aroclor-1260	81	12	

Surrogate	%REC	Limits
TCMX	124	63-141
Decachlorobiphenyl	116	50-158

Field ID: J4W@2.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/16/07
Lab ID: 194786-019 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	310	12	
Aroclor-1260	460	12	

Surrogate	%REC	Limits
TCMX	108	63-141
Decachlorobiphenyl	103	50-158

 Field ID:
 J5B@5.0'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/16/07

 Lab ID:
 194786-020
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	17	12	

Surrogate	%REC	Limits
TCMX	122	63-141
Decachlorobiphenyl	114	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 194786 Client: Questa Engineering Corporation Analysis: EPA 8082 Sampled: 0 Project#: STANDARD 05/14/07 Matrix: Soil Received: 05/14/07 Units: ug/Kg as received 125199 Basis: Prepared: 05/15/07 Batch#:

BLANK Type: Analyzed: 05/15/07 OC387812 1.000 Lāb ID: Cleanup Method: EPA 3665A

Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	112	63-141
Decachlorobiphenyl	105	50-158

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	Polychlorinated	Biphenyls (PCBs)	
Lab #:	194786	Location: Former Larkspur Treatm	ment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B	
Project#:	STANDARD	Analysis: EPA 8082	
Type:	LCS	Diln Fac: 1.000	
Lab ID:	QC387813	Batch#: 125199	
Matrix:	Soil	Prepared: 05/15/07	
Units:	ug/Kg	Analyzed: 05/15/07	
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	165.3	177.4	107	68-138

Surrogate	%REC	Limits
TCMX	99	63-141
Decachlorobiphenyl	100	50-158

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	Polychlorinate	ed Biphenyls (PCBs)	
Lab #: 194	4786	Location: Former Larkspur Treatment Plant	
Client: Que	esta Engineering Corporation	Prep: EPA 3550B	
Project#: STA	ANDARD	Analysis: EPA 8082	
Field ID:	K3E@2.5'	Batch#: 125199	
MSS Lab ID:	194786-003	Sampled: 05/14/07	
Matrix:	Soil	Received: 05/14/07	
Units:	ug/Kg	Prepared: 05/15/07	
Basis:	as received	Analyzed: 05/15/07	
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC387814

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<2.006	166.4	185.3	111	72-140

Surrogate	%REC	Limits
TCMX	102	63-141
Decachlorobiphenyl	86	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC387815

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	166.1	188.6	114	72-140	2	27

Surrogate	%REC	Limits
TCMX	99	63-141
Decachlorobiphenyl	89	50-158



Total Extractable Hydrocarbons Location: Former Larkspur Treatment Plant Prep: SHAKER TABLE Lab #: 194821 Client: Questa Engineering Corporation Prep: Analysis: EPA 8015B Project#: STANDARD 05/15/07 05/15/07 Matrix: Sampled: Units: mq/Kq Received: Prepared: Basis: as received 05/17/07 Batch#: 125324

Field ID: F1N@1.5' Diln Fac: 2.000 05/17/07 SAMPLE Analyzed: Type: Lab ID: 194821-001

Analyte Result Diesel C10-C24 9.8 H Y 2.0 Motor Oil C24-C36 68 10

Surrogate %REC Limits Hexacosane 82 40-127

3.000 Field ID: F2S@1.5' Diln Fac: Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-002

Result Analyte Diesel C10-C24 23 H Y 3.0 Motor Oil C24-C36 140 15

Surrogate Limits Hexacosane

Field ID: F3E@1.5' Diln Fac: 2.000 SAMPLE Analyzed: 05/17/07 Type:

Lab ID: 194821-003

Result Analyte RL Diesel C10-C24 14 H Y 2.0 Motor Oil C24-C36 110 10

Surrogate %REC Limits Hexacosane 89 40-127

Field ID: F4W@1.5' Diln Fac: 1.000 SAMPLE 05/17/07 Type: Analyzed:

Lab ID: 194821-004

Result Analyte Diesel C10-C24 8.6 H Y 1.0 Motor Oil C24-C36 46 5.0

Surrogate %REC Limits Hexacosane 40-127 88

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Total Extractable Hydrocarbons

Lab #: 194821 Location: Former Larkspur Treatment Plant

Client: Questa Engineering Corporation Prep: SHAKER TABLE Project#: STANDARD Analysis: EPA 8015B

 Matrix:
 Soil
 Sampled:
 05/15/07

 Units:
 mg/Kg
 Received:
 05/15/07

 Basis:
 as received
 Prepared:
 05/17/07

 Batch#:
 125324
 05/17/07

Field ID: F5BM@3.5' Diln Fac: 1.000 Type: SAMPLE Analyzed: 05/18/07

Lab ID: 194821-005

 Analyte
 Result
 RL

 Diesel C10-C24
 15 H Y
 1.0

 Motor Oil C24-C36
 75
 5.0

 Surrogate
 %REC
 Limits

 Hexacosane
 102
 40-127

Field ID: F6BE@3.5' Diln Fac: 2.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-006

 Analyte
 Result
 RL

 Diesel C10-C24
 12 H Y
 2.0

 Motor Oil C24-C36
 85
 10

Surrogate %REC Limits
Hexacosane 86 40-127

Field ID: F7BW@3.5' Diln Fac: 1.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-007

 Analyte
 Result
 RL

 Diesel C10-C24
 7.5 H Y
 1.0

 Motor Oil C24-C36
 53
 5.0

 Surrogate
 %REC
 Limits

 Hexacosane
 95
 40-127

Field ID: F8NE@1.5' Diln Fac: 2.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-008

 Analyte
 Result
 RL

 Diesel C10-C24
 21 H Y
 2.0

 Motor Oil C24-C36
 150
 10

 Surrogate
 %REC
 Limits

 Hexacosane
 109
 40-127

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Total Extractable Hydrocarbons

Lab #: 194821 Location: Former Larkspur Treatment Plant

Client: Questa Engineering Corporation Prep: SHAKER TABLE

Project#: STANDARD Analysis: EPA 8015B

 Matrix:
 Soil
 Sampled:
 05/15/07

 Units:
 mg/Kg
 Received:
 05/15/07

 Basis:
 as received
 Prepared:
 05/17/07

 Batch#:
 125324
 05/17/07

Field ID: F9NW@1.5' Diln Fac: 1.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-009

 Analyte
 Result
 RL

 Diesel C10-C24
 7.8 H Y
 0.99

 Motor Oil C24-C36
 34
 5.0

Surrogate %REC Limits
Hexacosane 108 40-127

Field ID: F10SE@1.5' Diln Fac: 3.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-010

 Analyte
 Result
 RL

 Diesel C10-C24
 16 H Y
 3.0

 Motor Oil C24-C36
 110
 15

 Surrogate
 %REC
 Limits

 Hexacosane
 92
 40-127

Field ID: F11SW@1.5' Diln Fac: 3.000 Type: SAMPLE Analyzed: 05/17/07

Lab ID: 194821-011

 Analyte
 Result
 RL

 Diesel C10-C24
 28 H Y
 3.0

 Motor Oil C24-C36
 150
 15

 Surrogate
 %REC
 Limits

 Hexacosane
 92
 40-127

Type: BLANK Diln Fac: 1.000 Lab ID: QC388325 Analyzed: 05/17/07

 Analyte
 Result
 RL

 Diesel C10-C24
 ND
 1.0

 Motor Oil C24-C36
 ND
 5.0

Surrogate%RECLimitsHexacosane9740-127

H= Heavier hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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	Total Extrac	table Hydrocarbons	
Lab #:	194821	Location: Former Larkspur Treat	ment Plant
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE	
Project#:	STANDARD	Analysis: EPA 8015B	
Type:	LCS	Diln Fac: 1.000	
Lab ID:	QC388326	Batch#: 125324	
Matrix:	Soil	Prepared: 05/17/07	
Units:	mg/Kg	Analyzed: 05/18/07	
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.55	44.67	90	58-127

Surrogate	%REC	Limits
Hexacosane	91	40-127

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	Total Extractable Hydrocarbons						
Lab #: 19	94821	Location: Former Larkspur Treatment Plant					
Client: Qu	uesta Engineering Corporation	Prep: SHAKER TABLE					
Project#: ST	randard	Analysis: EPA 8015B					
Field ID:	ZZZZZZZZZ	Batch#: 125324					
MSS Lab ID:	194850-009	Sampled: 05/16/07					
Matrix:	Soil	Received: 05/16/07					
Units:	mg/Kg	Prepared: 05/17/07					
Basis:	as received	Analyzed: 05/18/07					
Diln Fac:	1.000						

Type: MS Cleanup Method: EPA 3630C

Lab ID: QC388327

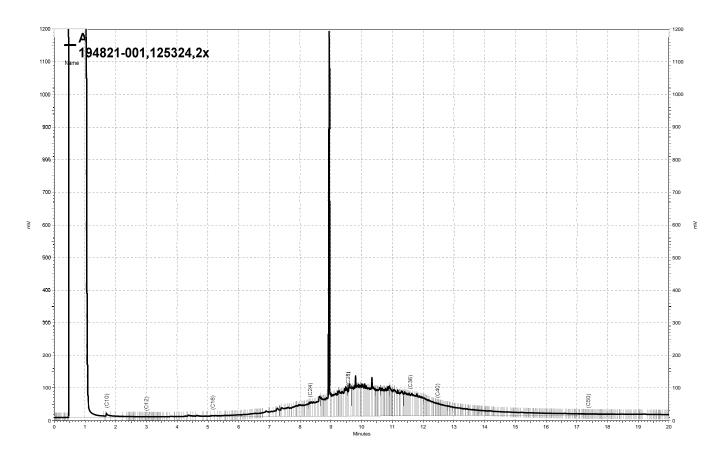
Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	0.3010	49.92	46.99	94	29-147

Surrogate	%REC	Limits
Hexacosane	97	40-127

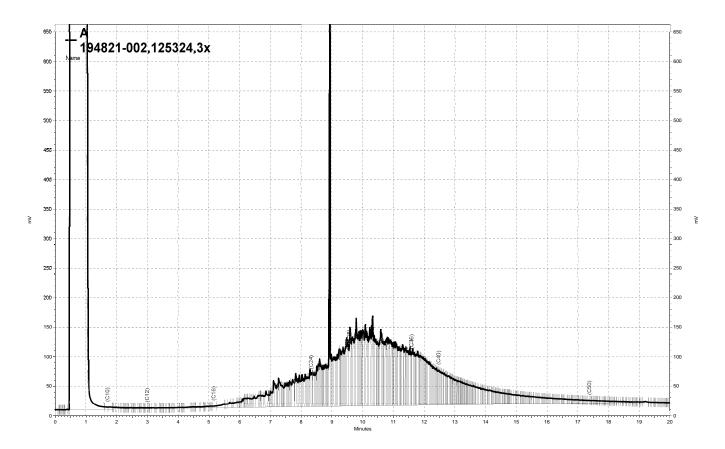
Type: MSD Cleanup Method: EPA 3630C

Lab ID: QC388328

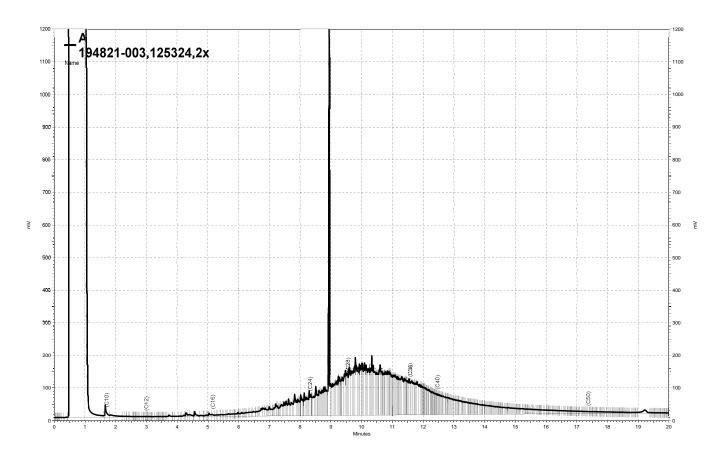
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.94	44.60	89	29-147	5	46



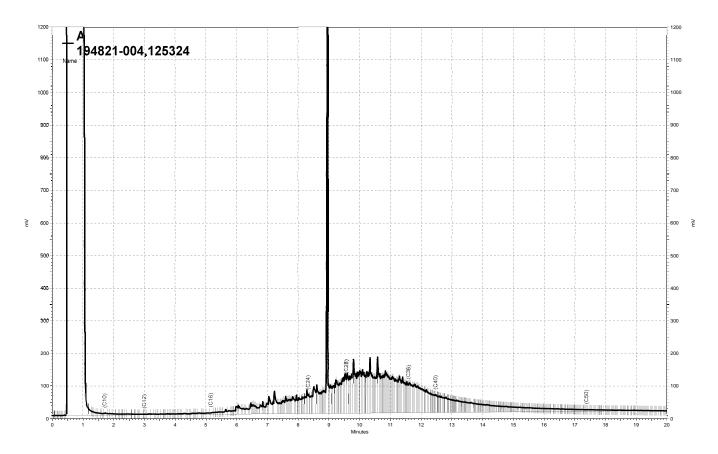
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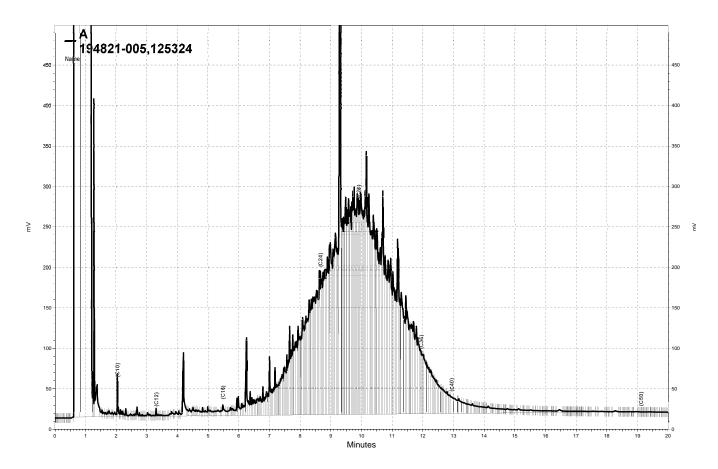
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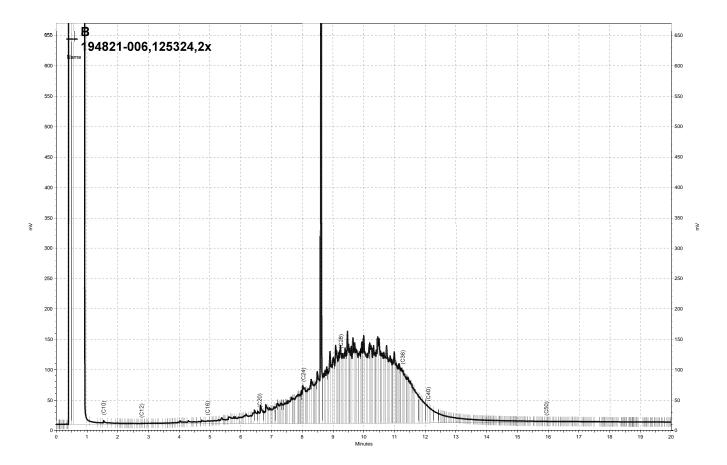
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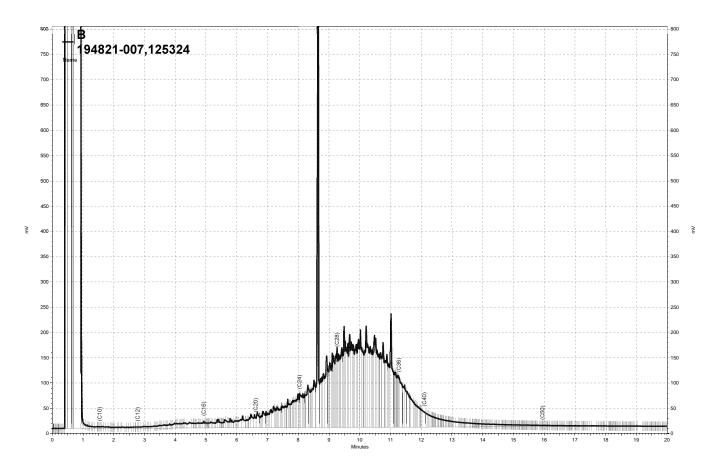
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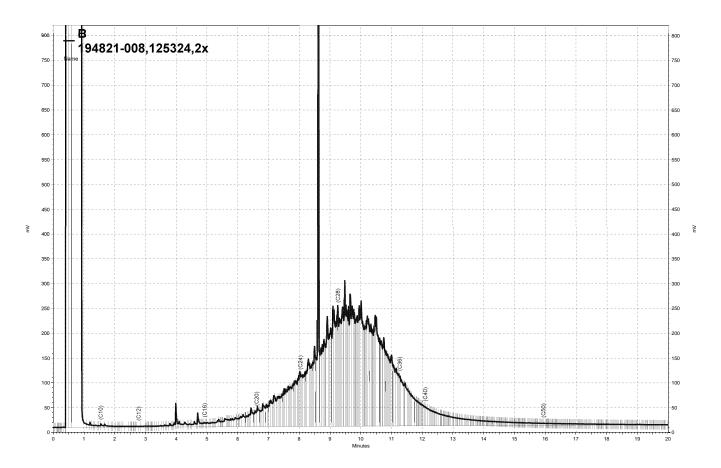
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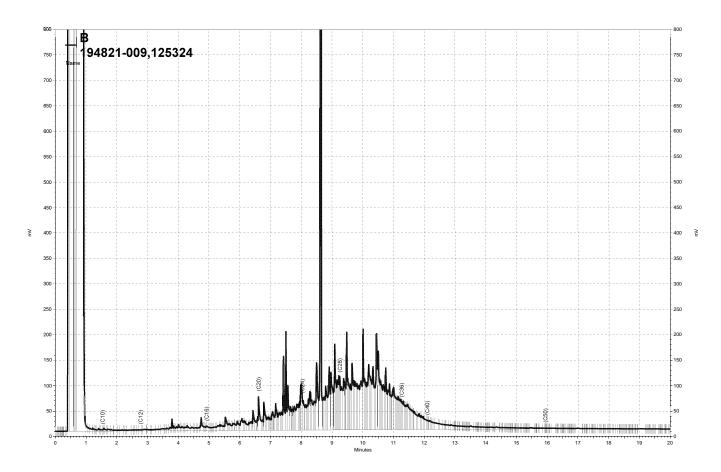
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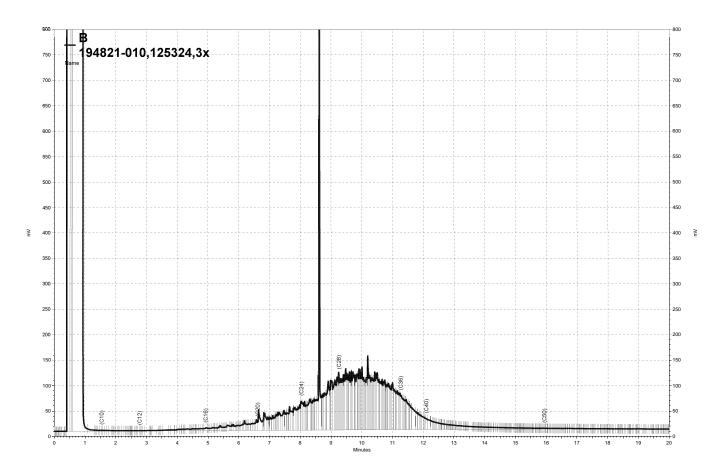
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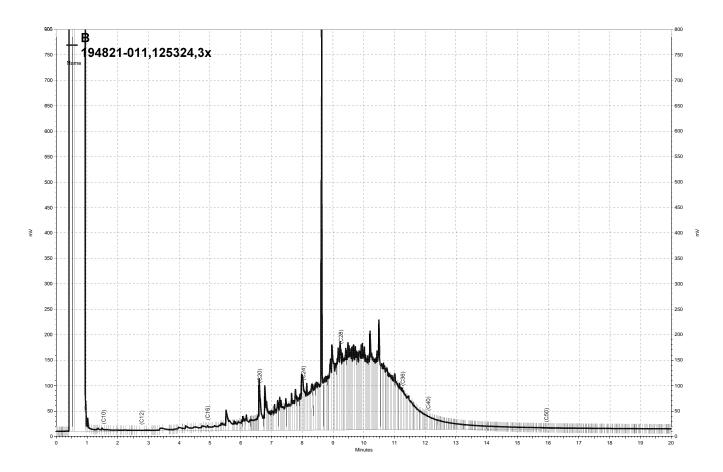
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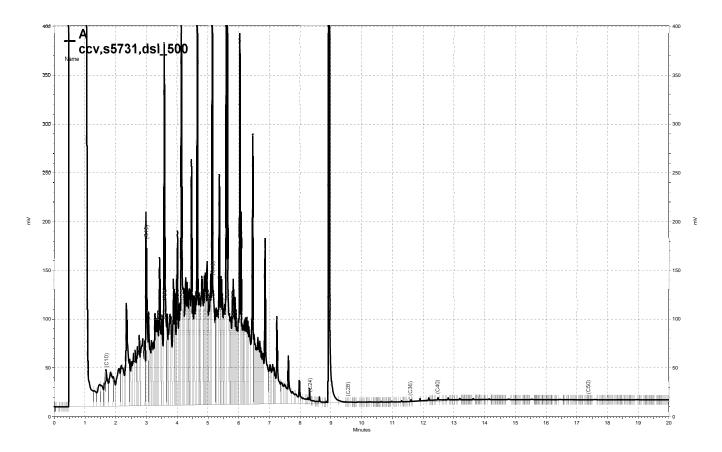
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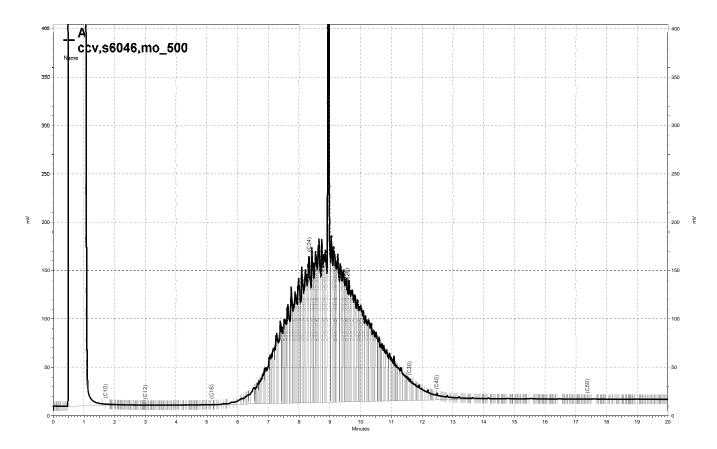
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Field ID: F1N@1.5' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-001 Analyzed: 05/17/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	120	12	
Aroclor-1260	86	12	

Surrogate	%REC	Limits
TCMX	115	63-141
Decachlorobiphenyl	104	50-158

Field ID: F2S@1.5' Batch#: 125269 Type: SAMPLE Prepared: 05/16/07 Lab ID: 194821-002 Analyzed: 05/17/07 Diln Fac: 5.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	60	
Aroclor-1221	ND	120	
Aroclor-1232	ND	60	
Aroclor-1242	ND	60	
Aroclor-1248	ND	60	
Aroclor-1254	1,600	60	
Aroclor-1260	1,900	60	

Surrogate	%REC	Limits
TCMX	107	63-141
Decachlorobiphenyl	115	50-158

8.1

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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Field ID: F3E@1.5' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-003 Analyzed: 05/17/07

Diln Fac: 2.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	48	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	910	24	
Aroclor-1260	890	24	

Surrog	gate %REC	Limits
CMX	97	63-141
1 C1-121	<i>7 1</i>	05 111
Decachlorobipher	enyl 101	50-158

Field ID: F4W@1.5' Batch#: 125269 05/16/07 Type: SAMPLE Prepared: Lab ID: 194821-004 Analyzed: 05/17/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	380	12	
Aroclor-1260	410	12	

Surrogate	%REC	Limits
TCMX	122	63-141
Decachlorobiphenyl	114	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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Field ID: F5BM@3.5' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-005 Analyzed: 05/16/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	96	63-141
Decachlorobiphenyl	93	50-158

Field ID: F6BE@3.5' Batch#: 125269 Type: SAMPLE Prepared: 05/16/07 Lab ID: 194821-006 Analyzed: 05/17/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	20	12	

Surrogate	%REC	Limits
TCMX	109	63-141
Decachlorobiphenyl	112	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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Field ID: F7BW@3.5' Batch#: 125269
Type: SAMPLE Prepared: 05/16/07
Lab ID: 194821-007 Analyzed: 05/18/07
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	250	12
Aroclor-1260	290	12

Surrogate	%REC	Limits
TCMX	110	63-141
Decachlorobiphenyl	101	50-158

Field ID: F8NE@1.5' Batch#: 125269 Type: SAMPLE Prepared: 05/16/07 Lab ID: 194821-008 Analyzed: 05/18/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	33	12	

Surrogate	%REC	Limits
TCMX	110	63-141
Decachlorobiphenyl	100	50-158

DO= Diluted Out

ND= Not Detected RL= Reporting Limit

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Field ID: F9NW@1.5' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-009 Analyzed: 05/18/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

	Surrogate	%REC	Limits
CMX		106	63-141
	orobiphenyl	107	50-158

Field ID: F10SE@1.5' Batch#: 125269 Type: SAMPLE Prepared: 05/16/07 Lab ID: 194821-010 Analyzed: 05/18/07 Diln Fac: 3.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	36	
Aroclor-1221	ND	72	
Aroclor-1232	ND	36	
Aroclor-1242	ND	36	
Aroclor-1248	ND	36	
Aroclor-1254	1,500	36	
Aroclor-1260	1,400	36	

Surrogate	%REC	Limits
TCMX	133	63-141
Decachlorobiphenyl	127	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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Field ID: F11SW@1.5' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-011 Analyzed: 05/18/07

Diln Fac: 10.00 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	120	
Aroclor-1221	ND	240	
Aroclor-1232	ND	120	
Aroclor-1242	ND	120	
Aroclor-1248	ND	120	
Aroclor-1254	3,800	120	
Aroclor-1260	4,700	120	

Surrogate	%REC	Limits
TCMX	DO	63-141
Decachlorobiphenyl	DO	50-158

Field ID: G1N@3.0' Batch#: 125269

Type: SAMPLE Prepared: 05/16/07

Lab ID: 194821-012 Analyzed: 05/18/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	57	12	
Aroclor-1260	100	12	

Surrogate	%REC	Limits
TCMX	99	63-141
Decachlorobiphenyl	94	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Field ID: G2S@3.0' Batch#: 125358

Type: SAMPLE Prepared: 05/18/07

Lab ID: 194821-013 Analyzed: 05/18/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	9.5	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.5	
Aroclor-1242	ND	9.5	
Aroclor-1248	ND	9.5	
Aroclor-1254	98	9.5	
Aroclor-1260	220	9.5	

Surrogate	%REC	Limits
TCMX	90	63-141
Decachlorobiphenyl	77	50-158

Field ID: G3E@2.0' Batch#: 125358 Type: SAMPLE Prepared: 05/18/07 Lab ID: 194821-014 Analyzed: 05/18/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	9.6	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.6	
Aroclor-1242	ND	9.6	
Aroclor-1248	ND	9.6	
Aroclor-1254	160	9.6	
Aroclor-1260	32	9.6	

Surrogate	%REC	Limits
TCMX	108	63-141
Decachlorobiphenyl	99	50-158

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 194821 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 05/15/07 Units: ug/Kg Received: 05/15/07 Basis: as received

Field ID: G4E@4.5' Batch#: 125358

Type: SAMPLE Prepared: 05/18/07

Lab ID: 194821-015 Analyzed: 05/21/07

Diln Fac: 5.000 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	48
Aroclor-1221	ND	96
Aroclor-1232	ND	48
Aroclor-1242	ND	48
Aroclor-1248	ND	48
Aroclor-1254	1,700	48
Aroclor-1260	1,400	48

Surrogate	%REC	Limits
TCMX	115	63-141
Decachlorobiphenyl	115	50-158

Field ID: G5SW@3.5' Batch#: 125358 Type: SAMPLE Prepared: 05/18/07 Lab ID: 194821-016 Analyzed: 05/18/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	9.5	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.5	
Aroclor-1242	ND	9.5	
Aroclor-1248	ND	9.5	
Aroclor-1254	21	9.5	
Aroclor-1260	30	9.5	

Surrogate	%REC	Limits
TCMX	111	63-141
Decachlorobiphenyl	98	50-158

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 194821 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 05/15/07 Units: ug/Kg Received: 05/15/07 Basis: as received

Field ID: G6NW@2.0' Batch#: 125358

Type: SAMPLE Prepared: 05/18/07

Lab ID: 194821-017 Analyzed: 05/19/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	9.6	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.6	
Aroclor-1242	ND	9.6	
Aroclor-1248	ND	9.6	
Aroclor-1254	ND	9.6	
Aroclor-1260	ND	9.6	

Surroga	%REC	2	%REC
TCMX	106		106
Decachlorobipheny	101	Decachlorok	101

Field ID: G7NW@4.5' Batch#: 125358 Type: SAMPLE Prepared: 05/18/07 Lab ID: 194821-018 Analyzed: 05/21/07 Diln Fac: 5.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	48	
Aroclor-1221	ND	95	
Aroclor-1232	ND	48	
Aroclor-1242	ND	48	
Aroclor-1248	ND	48	
Aroclor-1254	2,000	48	
Aroclor-1260	2,200	48	

Surrogate	%REC	Limits
TCMX	101	63-141
Decachlorobiphenyl	111	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Polychlorinated Biphenyls (PCBs) Lab #: 194821 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil 05/15/07 Sampled: Units: ug/Kg Received: 05/15/07 Basis: as received

Field ID: G8SWB@6.5' Batch#: 125358

Type: SAMPLE Prepared: 05/18/07

Lab ID: 194821-019 Analyzed: 05/19/07

Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	9.5	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.5	
Aroclor-1242	ND	9.5	
Aroclor-1248	ND	9.5	
Aroclor-1254	26	9.5	
Aroclor-1260	29	9.5	

Surrogate	%REC	Limits
TCMX	111	63-141
Decachlorobiphenyl	102	50-158

Field ID: G9B@6.5' Batch#: 125358 Type: SAMPLE Prepared: 05/18/07 Lab ID: 194821-020 Analyzed: 05/21/07 Diln Fac: 2.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	38	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	720	19	
Aroclor-1260	880	19	

Surrogate	%REC	Limits
TCMX	99	63-141
Decachlorobiphenyl	101	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 194821 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 05/15/07 Units: ug/Kg Received: 05/15/07 Basis: as received

Type: BLANK Prepared: 05/16/07 Lab ID: QC388117 Analyzed: 05/16/07 Diln Fac: 1.000 Cleanup Method: EPA 3665A

Batch#: 125269

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Type: BLANK Prepared: 05/18/07
Lab ID: QC388487 Analyzed: 05/18/07
Diln Fac: 1.000 Cleanup Method: EPA 3620B

Batch#: 125358

Analyte	Result	RL	
Aroclor-1016	ND	9.6	
Aroclor-1221	ND	19	
Aroclor-1232	ND	9.6	
Aroclor-1242	ND	9.6	
Aroclor-1248	ND	9.6	
Aroclor-1254	ND	9.6	
Aroclor-1260	ND	9.6	

Surrogate	%REC	Limits
TCMX	100	63-141
Decachlorobiphenyl	104	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls	(PCBs)
Lab #:	194821	Location: Fo	rmer Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EP.	A 3550B
Project#:	STANDARD	Analysis: EP.	A 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388118	Batch#:	125269
Matrix:	Soil	Prepared:	05/16/07
Units:	ug/Kg	Analyzed:	05/16/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.2	176.3	106	68-138

Surrogate	%REC	Limits
TCMX	112	63-141
Decachlorobiphenyl	111	50-158

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	Polychlorinated	Biphenyls	s (PCBs)
Lab #: 1948	321	Location:	Former Larkspur Treatment Plant
Client: Ques	sta Engineering Corporation	Prep:	EPA 3550B
Project#: STAN	IDARD	Analysis:	EPA 8082
Field ID:	F5BM@3.5'	Batch#:	125269
MSS Lab ID:	194821-005	Sampled:	05/15/07
Matrix:	Soil	Received:	05/15/07
Units:	ug/Kg	Prepared:	05/16/07
Basis:	as received	Analyzed:	05/16/07
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC388119

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<1.655	166.5	170.2	102	72-140

Surrogate	%REC	Limits
TCMX	92	63-141
Decachlorobiphenyl	80	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC388120

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	166.5	166.4	100	72-140	2	27

Surrogate	%REC	Limits
TCMX	88	63-141
Decachlorobiphenyl	84	50-158



	Polychlorinated	Biphenyls	s (PCBs)
Lab #:	194821	Location:	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388491	Batch#:	125358
Matrix:	Soil	Prepared:	05/18/07
Units:	ug/Kg	Analyzed:	05/18/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.2	152.7	92	68-138

Surrogate	%REC	Limits
TCMX	104	63-141
Decachlorobiphenyl	109	50-158

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	Polychlorinated	Biphenyls	s (PCBs)
Lab #: 1948	21	Location: I	Former Larkspur Treatment Plant
Client: Ques	ta Engineering Corporation	Prep: I	EPA 3550B
Project#: STAN	DARD	Analysis: I	EPA 8082
Field ID:	ZZZZZZZZZ	Batch#:	125358
MSS Lab ID:	194874-021	Sampled:	05/17/07
Matrix:	Soil	Received:	05/17/07
Units:	ug/Kg	Prepared:	05/18/07
Basis:	as received	Analyzed:	05/18/07
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC388492

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<1.318	164.5	162.2	99	72-140

Surrogate	%REC	Limits
TCMX	114	63-141
Decachlorobiphenyl	120	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC388493

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	164.9	159.9	97	72-140	2	27

Surrogate	%REC	Limits
TCMX	112	63-141
Decachlorobiphenyl	109	50-158



		Lead	
Lab #:	194821	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: EPA 3050B	
Project#:	STANDARD	Analysis: EPA 6010B	
Analyte:	Lead	Batch#: 125296	
Matrix:	Soil	Sampled: 05/15/07	
Units:	mg/Kg	Received: 05/15/07	
Basis:	as received	Prepared: 05/16/07	
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Analyzed
G1N@3.0'	SAMPLE	194821-012	9.9	0.15	05/18/07
G2S@3.0'	SAMPLE	194821-013	6.0	0.15	05/18/07
G3E@2.0'	SAMPLE	194821-014	13	0.15	05/18/07
G4E@4.5'	SAMPLE	194821-015	6.5	0.15	05/18/07
G5SW@3.5'	SAMPLE	194821-016	12	0.15	05/18/07
G6NW@2.0'	SAMPLE	194821-017	19	0.15	05/18/07
G7NW@4.5'	SAMPLE	194821-018	6.5	0.15	05/18/07
G8SWB@6.5'	SAMPLE	194821-019	7.6	0.15	05/18/07
G9B@6.5'	SAMPLE	194821-020	9.3	0.15	05/18/07
	BLANK	QC388230	ND	0.15	05/17/07

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Lead					
Lab #: 19482	1	Location: Form	er Larkspur Treatment Plant		
Client: Questa	Engineering Corporation	Prep: EPA	3050B		
Project#: STANDA	ARD	Analysis: EPA	6010B		
Analyte:	Lead	Diln Fac:	1.000		
Field ID:	ZZZZZZZZZ	Batch#:	125296		
MSS Lab ID:	194770-001	Sampled:	05/11/07		
Matrix:	Soil	Received:	05/14/07		
Units:	mg/Kg	Prepared:	05/16/07		
Basis:	as received	Analyzed:	05/17/07		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC388231		100.0	96.86	97	80-120		
BSD	QC388232		100.0	100.1	100	80-120	3	20
MS	QC388233	21.57	90.91	106.9	94	55-122		
MSD	QC388234		94.34	101.6	85	55-122	8	26



	Total Extra	ctable Hydrocarbons
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE
Project#:	STANDARD	Analysis: EPA 8015B
Matrix:	Soil	Sampled: 05/17/07
Units:	mg/Kg	Received: 05/17/07
Basis:	as received	Prepared: 05/19/07
Diln Fac:	1.000	Analyzed: 05/21/07
Batch#:	125401	

Field ID: 16W@1.25' Lab ID: 194879-011
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL	
Diesel C10-C24	12 H Y	0.99	
Motor Oil C24-C36	41 H L	5.0	

Surrogate	%REC	Limits
Hexacosane	88	40-127

Field ID: 17BW@2.5' Lab ID: 194879-012 Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL	
Diesel C10-C24	12 H Y	0.99	
Motor Oil C24-C36	91 H L	5.0	

Surrogate	%REC	Limits
Hexacosane	82	40-127

Type: BLANK Cleanup Method: EPA 3630C

Lab ID: QC388643

Analyte	Result	RL	
Diesel C10-C24	ND	1.0	
Motor Oil C24-C36	ND	5.0	

Surrogate	%REC	Limits
Hexacosane	89	40-127

H= Heavier hydrocarbons contributed to the quantitation

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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	Total Extrac	table Hydrocarbons	
Lab #:	194879	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: SHAKER TABLE	
Project#:	STANDARD	Analysis: EPA 8015B	
Type:	LCS	Diln Fac: 1.000	
Lab ID:	QC388644	Batch#: 125401	
Matrix:	Soil	Prepared: 05/19/07	
Units:	mg/Kg	Analyzed: 05/21/07	
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.59	41.06	83	58-127

Surrogate	%REC	Limits
Hexacosane	79	40-127

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	Total Extractable Hydrocarbons					
Lab #: 194879		Location: Forme:	r Larkspur Treatment Plant			
Client: Questa	Engineering Corporation	Prep: SHAKE	R TABLE			
Project#: STANDA	ARD	Analysis: EPA 8	015B			
Field ID:	ZZZZZZZZZ	Batch#:	125401			
MSS Lab ID:	194793-002	Sampled:	04/19/07			
Matrix:	Soil	Received:	05/14/07			
Units:	mg/Kg	Prepared:	05/19/07			
Basis:	as received	Analyzed:	05/21/07			
Diln Fac:	1.000					

Type: MS Lab ID: QC388645

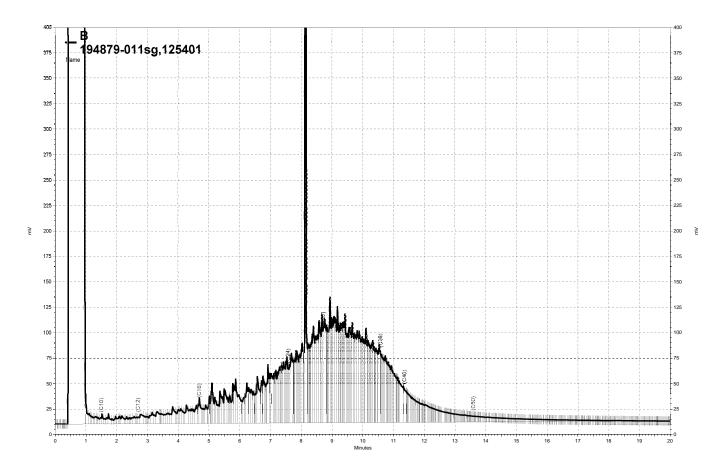
Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	6.138	49.77	38.38	65	29-147

Surrogate	%REC	Limits
Hexacosane	61	40-127

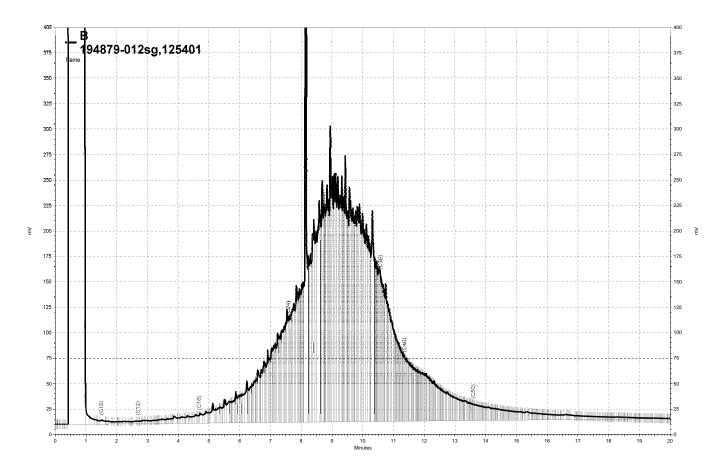
Type: MSD Lab ID: QC388646

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Diesel C10-C24	49.62	52.70	94	29-147	32 46

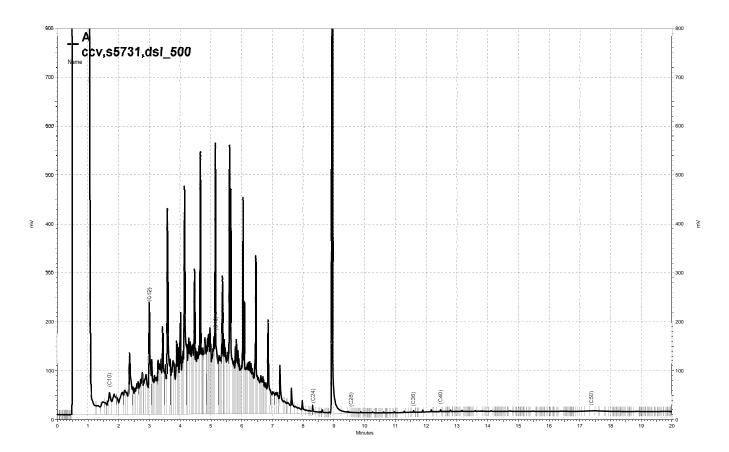
Surrogate	%REC	Limits
Hexacosane	76	40-127



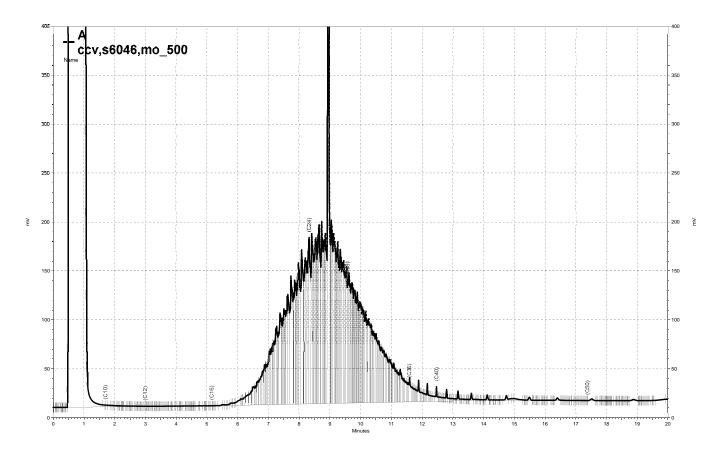
\\Lims\gdrive\ezchrom\Projects\GC15B\Data\141b008, B



\Lims\gdrive\ezchrom\Projects\GC15B\Data\141b009, B



\Lims\gdrive\ezchrom\Projects\GC11A\Data\141a004, A



\Lims\gdrive\ezchrom\Projects\GC11A\Data\141a003, A

	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 H6NE@2'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/20/07

 Lab ID:
 194879-001
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	75	12	
Aroclor-1260	56	12	

Surrogate	%REC	Limits
TCMX	101	63-141
Decachlorobiphenyl	100	50-158

 Field ID:
 H7NW@2'
 Diln Fac:
 10.00

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-002
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	120	
Aroclor-1221	ND	240	
Aroclor-1232	ND	120	
Aroclor-1242	ND	120	
Aroclor-1248	ND	120	
Aroclor-1254	5,900	120	
Aroclor-1260	5,900	120	

Surrogate	%REC	Limits
TCMX	DO	63-141
Decachlorobiphenyl	DO	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	194879	Location:	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8082
Units:	ug/Kg	Sampled:	05/17/07
Basis:	as received	Received:	05/17/07
Batch#:	125402	Prepared:	05/19/07

 Field ID:
 H8SE@2'
 Diln Fac:
 3.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-003
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	36	
Aroclor-1221	ND	72	
Aroclor-1232	ND	36	
Aroclor-1242	ND	36	
Aroclor-1248	ND	36	
Aroclor-1254	1,600	36	
Aroclor-1260	1,600	36	

Surrogate	%REC	Limits
TCMX	97	63-141
Decachlorobiphenyl	106	50-158

 Field ID:
 H9SW@2'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-004
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	122	63-141
Decachlorobiphenyl	125	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 H10EN@2'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-005
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	640	12	
Aroclor-1260	750	12	

Surrogate	%REC	Limits
TCMX	125	63-141
Decachlorobiphenyl	124	50-158

 Field ID:
 H11ES@2'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-006
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	660	12	
Aroclor-1260	600	12	

Surrogate	%REC	Limits
TCMX	118	63-141
Decachlorobiphenyl	110	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 H12WN@2'
 Diln Fac:
 5.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-007
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	60	
Aroclor-1221	ND	120	
Aroclor-1232	ND	60	
Aroclor-1242	ND	60	
Aroclor-1248	ND	60	
Aroclor-1254	3,000	60	
Aroclor-1260	2,500	60	

Surrogate	%REC	Limits
TCMX	109	63-141
Decachlorobiphenyl	118	50-158

 Field ID:
 H13WS@2'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-008
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	37	12	
Aroclor-1260	59	12	

Surrogate	%REC	Limits
TCMX	119	63-141
Decachlorobiphenyl	116	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 H14BNE@4'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-009
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	450	12	
Aroclor-1260	440	12	

Surrogate	%REC	Limits
TCMX	120	63-141
Decachlorobiphenyl	122	50-158

 Field ID:
 H15BSW@4'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-010
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	106	63-141
Decachlorobiphenyl	113	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 J6N@2.5
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-013
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	113	63-141
Decachlorobiphenyl	106	50-158

 Field ID:
 J7S@2.5
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-014
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	18	12	

Surrogate	%REC	Limits
TCMX	114	63-141
Decachlorobiphenyl	110	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	194879	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/Kg	Sampled: 05/17/07
Basis:	as received	Received: 05/17/07
Batch#:	125402	Prepared: 05/19/07

 Field ID:
 J8WN@2.5
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-015
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

	Surrogate	%REC	Limits
TCMX		103	63-141
Decachlo	lorobiphenyl	104	50-158

 Field ID:
 J9WS@2.5
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-016
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	340	12	
Aroclor-1260	460	12	

Surrogate	%REC	Limits
TCMX	102	63-141
Decachlorobiphenyl	97	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs)						
Lab #:	194879	Location: Former Larkspur Treatment Plant				
Client:	Questa Engineering Corporation	Prep: EPA 3550B				
Project#:	STANDARD	Analysis: EPA 8082				
Units:	ug/Kg	Sampled: 05/17/07				
Basis:	as received	Received: 05/17/07				
Batch#:	125402	Prepared: 05/19/07				

 Field ID:
 J10BW@5.
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/21/07

 Lab ID:
 194879-017
 Cleanup Method:
 EPA 3665A

Matrix: Soil

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	52	12	
Aroclor-1260	50	12	

Surrog	%REC	Limits
TCMX	96	63-141
Decachlorobiphen	85	50-158

Type: BLANK Diln Fac: 1.000
Lab ID: QC388647 Analyzed: 05/20/07
Matrix: Miscell. Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	94	63-141
Decachlorobiphenyl	96	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls	s (PCBs)
Lab #:	194879	Location:	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC388648	Batch#:	125402
Matrix:	Miscell.	Prepared:	05/19/07
Units:	ug/Kg	Analyzed:	05/20/07
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.6	157.6	95	68-138

Surrogate	%REC	Limits
TCMX	97	63-141
Decachlorobiphenyl	100	50-158

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	Polychlorinated	Bipheny	ls (PCBs)
Lab #: 19487	9	Location:	Former Larkspur Treatment Plant
Client: Quest	a Engineering Corporation	Prep:	EPA 3550B
Project#: STAND	ARD	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZ	Batch#:	125402
MSS Lab ID:	194864-001	Sampled:	05/16/07
Matrix:	Miscell.	Received:	05/17/07
Units:	ug/Kg	Prepared:	05/19/07
Basis:	as received	Analyzed:	05/20/07
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC388649

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<1.643	165.3	158.1	96	72-140

Surrogate	%REC	Limits
TCMX	95	63-141
Decachlorobiphenyl	94	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC388650

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	166.5	174.3	105	72-140	9	27

Surrogate	%REC	Limits
TCMX	100	63-141
Decachlorobiphenyl	99	50-158



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 195023 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 05/24/07 05/24/07 Sampled: Matrix: Soil Received: Units: ug/Kg 05/25/07 Basis: as received Prepared: Batch#: 125621

Field ID: G10B@7.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/27/07
Lab ID: 195023-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	55	12	
Aroclor-1260	74	12	

Surrogate	%REC	Limits
TCMX	128	63-141
Decachlorobiphenyl	116	50-158

Field ID: G11S@3.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 05/28/07
Lab ID: 195023-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	71	12	
Aroclor-1260	74	12	

Surrogate	%REC	Limits
TCMX	109	63-141
Decachlorobiphenyl	116	50-158

 Field ID:
 G12E@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 05/28/07

 Lab ID:
 195023-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	550	12	
Aroclor-1260	710	12	

Surrogate	%REC	Limits
TCMX	128	63-141
Decachlorobiphenyl	126	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 195023 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: 270025 Matrix: Soil 05/24/07 Received: 05/24/07 Units: ug/Kg as received 125621 Basis: Prepared: 05/25/07 Batch#:

G13NW@4.5' Field ID: Diln Fac: 3.000 Type: SAMPLE Analyzed: 05/31/07 Lab ID: 195023-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	36	
Aroclor-1221	ND	72	
Aroclor-1232	ND	36	
Aroclor-1242	ND	36	
Aroclor-1248	ND	36	
Aroclor-1254	740	36	
Aroclor-1260	780	36	

Surrogate	%REC	Limits
TCMX	97	63-141
Decachlorobiphenyl	88	50-158

Type: BLANK Analyzed: 05/26/07 Lab ID: QC389553 Cleanup Method: EPA 3665A $\tilde{1}.000$ Diln Fac:

Analyte Result RLAroclor-1016 ND 12 Aroclor-1221 24 ND Aroclor-1232 Aroclor-1242 12 ND 12 ND Aroclor-1248 ND 12 Aroclor-1254 Aroclor-1260 ND 12 12 ND

Surrogate	%REC	Limits
TCMX	127	63-141
Decachlorobiphenyl	125	50-158

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	195023		Location:	Former Larkspur Treatment Plant
Client:	Questa Engin	eering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC389	554	Batch#:	125621
Matrix:	Soil		Prepared:	05/25/07
Units:	ug/Kg		Analyzed:	05/31/07
Basis:	as re	ceived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.2	190.6	115	68-138

Surrogate	%REC	Limits
TCMX	103	63-141
Decachlorobiphenyl	90	50-158

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 195034 Client: Prep: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 05/24/07 05/24/07 Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 05/30/07 1.000 Diln Fac: Analyzed: 06/01/07 Batch#: 125710

Field ID: F12E@1.5' Lab ID: 195034-001 Type: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	47	12	
Aroclor-1260	39	12	

Surrogate	%REC	Limits
TCMX	121	63-141
Decachlorobiphenyl	100	50-158

Field ID: F13SE@1.5' Lab ID: 195034-002 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	123	63-141
Decachlorobiphenyl	107	50-158

Field ID: F14SW@1.5' Lab ID: 195034-003 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	18	12	

Surrogate	%REC	Limits
TCMX	117	63-141
Decachlorobiphenyl	95	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 195034 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Matrix: Soil 05/24/07 Received: 05/24/07 Units: ug/Kg as received 1.000 Basis: Prepared: 05/30/07 Diln Fac: 06/01/07 Analyzed: Batch#: 125710

Field ID: F15BW@5.0' Lab ID: 195034-004
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	109	63-141
Decachlorobiphenyl	97	50-158

Field ID: F16W@2.0' Lab ID: 195034-005 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	29	12	

Surrogate	%REC	Limits
TCMX	120	63-141
Decachlorobiphenyl	98	50-158

Field ID: F17BFW@4.0' Lab ID: 195034-006 Type: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	106	63-141
Decachlorobiphenyl	100	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 195034 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 0 Matrix: Soil 05/24/07 Received: 05/24/07 Units: ug/Kg as received 1.000 Basis: Prepared: 05/30/07 Diln Fac: Analyzed: 06/01/07 Batch#: 125710

Field ID: 195034-007 J11WS@2.5' Lab ID: Cleanup Method: EPA 3665A Type: SAMPLE

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	460	12	
Aroclor-1260	380	12	

Surrogate	%REC	Limits	
TCMX	105	63-141	
Decachlorobiphenyl	80	50-158	

Type: BLANK Cleanup Method: EPA 3665A

Lab ID: QC389892

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	111	63-141
Decachlorobiphenyl	98	50-158

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	195034		Location:	Former Larkspur Treatment Plant
Client:	Questa Engir	neering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC389	9893	Batch#:	125710
Matrix:	Soil		Prepared:	05/30/07
Units:	ug/Kg	J	Analyzed:	06/01/07
Basis:	as re	eceived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	164.7	180.9	110	68-138

Surrogate	%REC	Limits
TCMX	119	63-141
Decachlorobiphenyl	107	50-158

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	Polychlorinated	Biphenyls (PCBs)
Lab #: Client:	195050 Questa Engineering Corporation	Location: Former Larkspur Treatment Plant Prep: EPA 3550B
Project#:		Analysis: EPA 8082
Matrix:	Soil	Sampled: 05/25/07
Units:	ug/Kg	Received: 05/25/07
Basis:	as received	Prepared: 05/30/07
Batch#:	125731	Analyzed: 05/31/07

Field ID: H16NW@2'
Type: SAMPLE
Lab ID: 195050-001 Diln Fac: 50.00 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	600
Aroclor-1221	ND	1,200
Aroclor-1232	ND	600
Aroclor-1242	ND	600
Aroclor-1248	ND	600
Aroclor-1254	12,000	600
Aroclor-1260	18,000	600

Surrogate	%REC	Limits
TCMX	DO	63-141
Decachlorobiphenyl	DO	50-158

Diln Fac: 1.000 Cleanup Method: EPA 3665A Field ID: H17SE@2'
Type: SAMPLE
Lab ID: 195050-002

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	38	12	
Aroclor-1260	52	12	

Surrogate	%REC	Limits	
TCMX	123	63-141	
Decachlorobiphenyl	97	50-158	

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 1 of 3



Polychlorinated Biphenyls (PCBs) Lab #: 195050 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 05/25/07 05/25/07 Matrix: Soil Received: Units: ug/Kg 05/30/07 05/31/07 as received 125731 Basis: Prepared: Batch#: Analyzed:

Field ID: H18EN@2' Diln Fac: 1.000
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 195050-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	112	63-141	
Decachlorobiphenyl	109	50-158	

Field ID: H19ES@2' Diln Fac: 1.000 Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 195050-004

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	130	12	
Aroclor-1260	71	12	

Surrogate	%REC	Limits
TCMX	120	63-141
Decachlorobiphenyl	87	50-158

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 195050 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 05/25/07 05/25/07 Matrix: Soil Units: ug/Kg Received: 05/30/07 05/31/07 as received 125731 Basis: Prepared: Batch#: Analyzed:

Field ID: H20WN@2' Diln Fac: 1.000
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 195050-005

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	140	12	
Aroclor-1260	93	12	

Surrogate	%REC	Limits
TCMX	120	63-141
Decachlorobiphenyl	99	50-158

Field ID: H21BNE@6' Diln Fac: 1.000
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 195050-006

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	110	63-141
Decachlorobiphenyl	99	50-158

Type: BLANK Diln Fac: 1.000 Lab ID: QC389991 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	113	63-141	
Decachlorobiphenyl	131	50-158	

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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		Polychlorinate	d Biphenyl	ls (PCBs)
Lab #:	195050		Location:	Former Larkspur Treatment Plant
Client:	Questa Engine	ering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC3899	92	Batch#:	125731
Matrix:	Soil		Prepared:	05/30/07
Units:	ug/Kg		Analyzed:	05/31/07
Basis:	as rec	eived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.6	184.8	111	68-138

Surrogate	%REC	Limits
TCMX	99	63-141
Decachlorobiphenyl	104	50-158

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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195609

Questa Engineering Corporation Project : 270025

1220 Brickyard Cove Road Location: Former Larkspur Treatment Plant Point Richmond, CA 94801 Level: II

<u>Sample ID</u>		<u>Lab ID</u>
J12	WS@2.5'	195609-001
H22	NW/E@2'	195609-002
H23	NW/N@2'	195609-003
H24	NW/COR@2'	195609-004
H25	NW/W@2'	195609-005
Н2б	BNW/W@4'	195609-006
H27	BNW/E@4'	195609-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Date: <u>07/03/2007</u>

Signature:

Operations Manager

Date: <u>07/03/2007</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 195609

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 06/25/07 Samples Received: 06/25/07

This hardcopy data package contains sample and QC results for seven soil samples, requested for the above referenced project on 06/25/07. The samples were received intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	06/25/07
Units:		ug/Kg	Received:	06/25/07
Basis:		as received	Prepared:	06/26/07
Batch#:		126646		

 Field ID:
 J12 WS@2.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 06/27/07

 Lab ID:
 195609-001
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	310	12	
Aroclor-1260	150	12	

Surroga	%REC	Limits
TCMX	86	63-141
Decachlorobipheny	75	50-158

 Field ID:
 H22 NW/E@2'
 Diln Fac:
 10.00

 Type:
 SAMPLE
 Analyzed:
 06/27/07

 Lab ID:
 195609-002
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	120	
Aroclor-1221	ND	240	
Aroclor-1232	ND	120	
Aroclor-1242	ND	120	
Aroclor-1248	ND	120	
Aroclor-1254	4,400	120	
Aroclor-1260	4,000	120	

Surrogate	%REC	Limits
TCMX	DO	63-141
Decachlorobiphenyl	DO	50-158

DO= Diluted Out
ND= Not Detected
PI = Perperting Lim

RL= Reporting Limit

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2.3

		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	06/25/07
Units:		ug/Kg	Received:	06/25/07
Basis:		as received	Prepared:	06/26/07
Batch#:		126646		

 Field ID:
 H23 NW/N@2'
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 06/27/07

 Lab ID:
 195609-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	48	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	1,000	24	
Aroclor-1260	1,000	24	

Field ID: H24 NW/COR@2' Diln Fac: 1.000
Type: SAMPLE Analyzed: 06/27/07
Lab ID: 195609-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	92	63-141
Decachlorobiphenyl	79	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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2.3

		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	06/25/07
Units:		ug/Kg	Received:	06/25/07
Basis:		as received	Prepared:	06/26/07
Batch#:		126646		

Diln Fac: Analyzed: Field ID: H25 NW/W@2' 1.000 Type: SAMPLE 06/27/07 Lab ID: 195609-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	92	63-141
Decachlorobiphenyl	77	50-158

Field ID: H26 BNW/W@4' Diln Fac: 1.000 Analyzed: 06/27/07 Type: SAMPLE Lab ID: 195609-006 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	97	63-141
Decachlorobiphenyl	88	50-158

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	06/25/07
Units:		ug/Kg	Received:	06/25/07
Basis:		as received	Prepared:	06/26/07
Batch#:		126646		

 Field ID:
 H27 BNW/E@4'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 06/27/07

 Lab ID:
 195609-007
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	38	12	
Aroclor-1260	35	12	

Surrogate	%REC	Limits
TCMX	92	63-141
Decachlorobiphenyl	78	50-158

Type: BLANK Analyzed: 06/26/07 Lab ID: QC393701 Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	104	63-141
Decachlorobiphenyl	119	50-158

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	ls (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa Enginee	ring Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC39370	12	Batch#:	126646
Matrix:	Soil		Prepared:	06/26/07
Units:	ug/Kg		Analyzed:	06/26/07
Basis:	as rece	eived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	166.3	117.9	71	68-138

Surrogate	%REC	Limits
TCMX	76	63-141
Decachlorobiphenyl	76	50-158

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		Polychlorinated	d Biphenyl	s (PCBs)
Lab #:	195609		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	126646
MSS Lab ID	:	195589-002	Sampled:	06/21/07
Matrix:		Soil	Received:	06/22/07
Units:		ug/Kg	Prepared:	06/26/07
Basis:		as received	Analyzed:	06/26/07
Diln Fac:		1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC393703

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<3.005	166.1	141.7	85	72-140

Surrogate	%REC	Limits
TCMX	84	63-141
Decachlorobiphenyl	89	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC393704

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	165.8	130.9	79	72-140	8	27

Surrogate	%REC	Limits
TCMX	77	63-141
Decachlorobiphenyl	79	50-158



		Polychlorinated	l Biphenyl	s (PCBs)
Lab #: 1	195609		Location:	Former Larkspur Treatment Plant
Client: Ç	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	126646
MSS Lab ID:	:	195587-005	Sampled:	06/22/07
Matrix:		Soil	Received:	06/22/07
Units:		ug/Kg	Prepared:	06/26/07
Basis:		as received	Analyzed:	06/26/07
Diln Fac:		1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC393803

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<3.641	165.9	192.1	116	72-140

Surrogate	%REC	Limits
TCMX	65	63-141
Decachlorobiphenyl	60	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC393804

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	165.1	163.6	99	72-140	16	27

Surrogate	%REC	Limits
TCMX	72	63-141
Decachlorobiphenyl	70	50-158



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 195642

Questa Engineering Corporation Project : 270025

1220 Brickyard Cove Road Location : Former Larkspur Treatment Plant Point Richmond, CA 94801 Level : II

Point Richmond, CA 94801

Sar	mple ID	<u>Lab ID</u>
G14	E@4.5	195642-001
G15	BE@7.0'	195642-002
G16	NW@4.5	195642-003
G17	NE@4.5	195642-004
G18	BN@7 '	195642-005
G19	W@4.5	195642-006
G20	BW@7.0'	195642-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Date: <u>07/03/2007</u>

Signature:

Operations Manager

Date: <u>07/03/2007</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 195642

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 06/26/07 Samples Received: 06/26/07

This hardcopy data package contains sample and QC results for seven soil samples, requested for the above referenced project on 06/26/07. The samples were received on ice and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 195642 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 Sampled: 06/26/07 06/26/07 Matrix: Soil Received: Units: ug/Kg 06/28/07 Basis: as received Prepared: Batch#: 126751

Field ID: G14 E@4.5 Diln Fac: 1.000
Type: SAMPLE Analyzed: 06/28/07
Lab ID: 195642-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	180	12	
Aroclor-1260	260	12	

Surrogate	%REC	Limits
TCMX	87	63-141
Decachlorobiphenyl	75	50-158

Field ID: G15 BE@7.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 06/28/07
Lab ID: 195642-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	410	12	
Aroclor-1260	570	12	

Surrogate	%REC	Limits
TCMX	96	63-141
Decachlorobiphenyl	75	50-158

 Field ID:
 G16 NW@4.5
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 06/29/07

 Lab ID:
 195642-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	24	
Aroclor-1221	ND	48	
Aroclor-1232	ND	24	
Aroclor-1242	ND	24	
Aroclor-1248	ND	24	
Aroclor-1254	1,000	24	
Aroclor-1260	1,400	24	

Surrogate	%REC	Limits
TCMX	107	63-141
Decachlorobiphenyl	114	50-158

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 195642 Location: Former Larkspur Treatment Plant Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: 270025 Matrix: Soil 06/26/07 Received: 06/26/07 Units: ug/Kg as received 126751 Basis: Prepared: 06/28/07 Batch#:

Field ID: G17 NE@4.5 Diln Fac: 4.000
Type: SAMPLE Analyzed: 06/29/07
Lab ID: 195642-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	48	
Aroclor-1221	ND	95	
Aroclor-1232	ND	48	
Aroclor-1242	ND	48	
Aroclor-1248	ND	48	
Aroclor-1254	2,800	48	
Aroclor-1260	1,200	48	

Surrogate	%REC	Limits	
TCMX	114	63-141	
Decachlorobiphenyl	123	50-158	

Field ID: G18 BN@7' Diln Fac: 1.000
Type: SAMPLE Analyzed: 06/28/07
Lab ID: 195642-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	80	12	
Aroclor-1260	90	12	

Surrogate	%REC	Limits
TCMX	103	63-141
Decachlorobiphenyl	84	50-158

 Field ID:
 G19 W@4.5
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 06/29/07

 Lab ID:
 195642-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	270	12	
Aroclor-1260	300	12	

Surrogate	%REC	Limits	
TCMX	96	63-141	
Decachlorobiphenyl	87	50-158	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 195642 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Matrix: Soil 06/26/07 Received: 06/26/07 Units: ug/Kg as received 126751 Basis: Prepared: 06/28/07 Batch#:

Field ID: G20 BW@7.0' Diln Fac: 1.000 Analyzed: 06/29/07 Type: SAMPLE Lab ID: 195642-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	44	12	
Aroclor-1260	54	12	

Surrogate	%REC	Limits
TCMX	100	63-141
Decachlorobiphenyl	92	50-158

Type: BLANK Analyzed: 06/28/07 Cleanup Method: EPA 3665A Lab ID: QC394145 $\tilde{1}.000$ Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	96	63-141
Decachlorobiphenyl	78	50-158

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	195642		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC394146	Batch#:	126751
Matrix:		Soil	Prepared:	06/28/07
Units:		ug/Kg	Analyzed:	06/28/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1232	165.0	149.5	91	68-138

Surrogate	%REC	Limits
TCMX	90	63-141
Decachlorobiphenyl	88	50-158

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		Polychlorinated	Bipheny	ls (PCBs)
Lab #: 1	95642		Location:	Former Larkspur Treatment Plant
Client: Q	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	126751
MSS Lab ID:	:	195629-011	Sampled:	06/25/07
Matrix:		Soil	Received:	06/26/07
Units:		ug/Kg	Prepared:	06/28/07
Basis:		as received	Analyzed:	06/28/07
Diln Fac:		1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC394147

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1232	<2.966	166.1	154.0	93	72-140

Surrogate	%REC	Limits
TCMX	98	63-141
Decachlorobiphenyl	88	50-158

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC394148

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1232	165.7	172.5	104	72-140	12	27

Surrogate	%REC	Limits
TCMX	104	63-141
Decachlorobiphenyl	104	50-158



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 197752 ANALYTICAL REPORT

Questa Engineering Corporation Project : 270025

1220 Brickyard Cove Road Location: Former Larkspur Treatment Plant Point Richmond, CA 94801 Level: II

	<u>Sample ID</u>	<u>Lab ID</u>
H28	NW/SE 2.0'	197752-001
H29	NW/NECOR 2.0'	197752-002
H30	NW/NW 2.0'	197752-003
H31	NW/B 4.0'	197752-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Date: <u>09/28/200</u>7

Signature:

Operations Manager

Date: <u>10/02/2007</u>

NELAP # 01107CA



CASE NARRATIVE

Laboratory number: 197752

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 09/20/07 Samples Received: 09/20/07

This hardcopy data package contains sample and QC results for four soil samples, requested for the above referenced project on 09/20/07. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 197752 Client: Questa Engineering Corporation Prep: <u>Project#: 270025</u> Analysis: EPA 8082 Sampled: Received: 09/20/07 09/20/07 Matrix: Soil ug/Kg Units: 09/21/07 Basis: as received Prepared: Batch#: 129722

Field ID: H28 NW/SE 2.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/22/07
Lab ID: 197752-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	27	12	
Aroclor-1260	54	12	

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	105	51-152

Field ID: H29 NW/NECOR 2.0' Diln Fac: 5.000 Type: SAMPLE Analyzed: 09/24/07 Lab ID: 197752-002

Analyte	Result	RL	
Aroclor-1016	ND	42	
Aroclor-1221	ND	83	
Aroclor-1232	ND	42	
Aroclor-1242	ND	42	
Aroclor-1248	ND	42	
Aroclor-1254	2,800	42	
Aroclor-1260	3,300	42	

Surrogate	%REC	Limits
TCMX	129	66-140
Decachlorobiphenyl	132	51-152

Field ID: H30 NW/NW 2.0' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/23/07
Lab ID: 197752-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	97	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 197752 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082
Sampled: 0 09/20/07 Matrix: Soil Received: 09/20/07 Units: ug/Kg as received 129722 Prepared: Basis: 09/21/07 Batch#:

Field ID: H31 NW/B 4.0' Diln Fac: 1.000 09/23/07 Type: SAMPLE Analyzed: Lab ID: 197752-004

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	16	12	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	105	51-152

Type: BLANK Diln Fac: 1.000 Analyzed: Lab ID: QC407197 09/22/07

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	111	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197752		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC407198	Batch#:	129722
Matrix:		Soil	Prepared:	09/21/07
Units:		ug/Kg	Analyzed:	09/22/07
Basis:		as received		

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.2	184.9	111	69-142
Aroclor-1260	166.2	233.9	141	69-155

Surrogate	%REC	Limits
TCMX	93	66-140
Decachlorobiphenyl	133	51-152

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 197752		Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: 270025		Analysis: EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#: 129722
MSS Lab ID:	197543-021	Sampled: 09/10/07
Matrix:	Soil	Received: 09/12/07
Units:	ug/Kg	Prepared: 09/21/07
Basis:	as received	Analyzed: 09/26/07
Diln Fac:	4.000	

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC407199

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<13.27	165.3	204.4	124	62-139
Aroclor-1260	840.3	165.3	1,676	506 NM	54-143

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	117	51-152

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC407200

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.2	198.3	120	62-139	3	33
Aroclor-1260	165.2	1,437	361 NM	54-143	15	34

Surrogate	%REC	Limits	
TCMX	104	56-140	
Decachlorobiphenyl	113	51-152	

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 197822 Client: Prep: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 09/24/07 09/24/07 Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 09/25/07 1.000 Diln Fac: Analyzed: 09/26/07 Batch#: 129855

Field ID: G21WN@4.5' Lab ID: 197822-001 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	220	12	
Aroclor-1260	340	12	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	83	51-152

Field ID: G22W@4.5' Lab ID: 197822-002 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	540	12	
Aroclor-1260	710	12	

Surrogate	%REC	Limits
TCMX	90	66-140
Decachlorobiphenvl	74	51-152

Field ID: G23WS@4.5' Lab ID: 197822-003 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	180	12	
Aroclor-1260	180	12	

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	73	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 197822 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 0 Matrix: Soil 09/24/07 Received: 09/24/07 Units: ug/Kg as received 1.000 Basis: Prepared: 09/25/07 Diln Fac: Analyzed: 09/26/07 Batch#: 129855

Field ID: G24BW@7.0' Lab ID: 197822-004 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	140	12	
Aroclor-1260	71	12	

Surrogate	%REC	Limits
TCMX	91	66-140
Decachlorobiphenyl	80	51-152

Type: BLANK Cleanup Method: EPA 3665A

Lab ID: QC407738

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	91	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197822		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC407739	Batch#:	129855
Matrix:		Soil	Prepared:	09/25/07
Units:		ug/Kg	Analyzed:	09/26/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.1	145.9	88	69-142
Aroclor-1260	165.1	134.0	81	69-155

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	78	51-152

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197856		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	09/25/07
Units:		ug/Kg	Received:	09/25/07
Basis:		as received	Prepared:	09/26/07
Diln Fac:		1.000	Analyzed:	09/27/07
Batch#:		129909		

Field ID: H32NECORNER@2' Lab ID: 197856-001 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	23	12	
Aroclor-1260	16	12	

\$	Surrogate	%REC	Limits
TCMX		79	66-140
Decachloro	robiphenyl	86	51-152

Field ID: H33NECBOTTOM@5' Lab ID: 197856-002 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	88	66-140
Decachlorobiphenyl	90	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197856		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	09/25/07
Units:		ug/Kg	Received:	09/25/07
Basis:		as received	Prepared:	09/26/07
Diln Fac:		1.000	Analyzed:	09/27/07
Batch#:		129909		

Field ID: H34NN@2' Lab ID: 197856-003
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	34	12	
Aroclor-1260	33	12	

Surro	Surrogate %REC	Limits
TCMX	CCMX 79	66-140
Decachlorobiphe	Decachlorobiphenyl 95	51-152

Type: BLANK Cleanup Method: EPA 3665A

Type: BLANK
Lab ID: QC407930

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	110	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197856		Location:	Former Larkspur Treatment Plant
Client:	Questa Eng	ineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS	3	Diln Fac:	1.000
Lab ID:	QC4	107931	Batch#:	129909
Matrix:	Soi	.1	Prepared:	09/26/07
Units:	ug/	'Kg	Analyzed:	09/27/07
Basis:	as	received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	164.5	144.8	88	69-142
Aroclor-1260	164.5	158.8	96	69-155

Surrogate	%REC	Limits
TCMX	73	66-140
Decachlorobiphenyl	100	51-152

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CASE NARRATIVE

Laboratory number: 197857

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 09/25/07 Samples Received: 09/25/07

This hardcopy data package contains sample and QC results for ten soil samples, requested for the above referenced project on 09/25/07. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 197857 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 Sampled: Received: 09/25/07 09/25/07 Matrix: Soil Units: ug/Kg Basis: as received Prepared: 09/26/07 Batch#: 129909

Field ID: G25 EN@4.5' Diln Fac: 5.000
Type: SAMPLE Analyzed: 09/28/07
Lab ID: 197857-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	82	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	3,600	41	
Aroclor-1260	1,900	41	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	97	51-152

Field ID: G26 ES@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/27/07
Lab ID: 197857-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	440	12	
Aroclor-1260	470	12	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	83	51-152

 Field ID:
 G27 E@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 09/27/07

 Lab ID:
 197857-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	220	12	
Aroclor-1260	220	12	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	72	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 197857 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 09/25/07 09/25/07 Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 09/26/07 129909 Batch#:

Field ID: G28 BE@8' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/27/07
Lab ID: 197857-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	330	12	
Aroclor-1260	330	12	

Surrogate	%REC	Limits
TCMX	91	66-140
Decachlorobiphenyl	70	51-152

Field ID: G29 BEE@9' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/27/07
Lab ID: 197857-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	610	12	
Aroclor-1260	780	12	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	82	51-152

Field ID: G30 N(SW)@4.5' Diln Fac: 3.000
Type: SAMPLE Analyzed: 09/28/07
Lab ID: 197857-006 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,400	25	
Aroclor-1260	1,000	25	

Surrogate	%REC	Limits	
TCMX	110	66-140	
Decachlorobiphenyl	91	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 197857 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 09/25/07 09/25/07 Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 09/26/07 129909 Batch#:

Field ID: G31 N(W)@4.5' Diln Fac: 3.000 Type: SAMPLE Analyzed: 09/28/07 Lab ID: 197857-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,700	25	
Aroclor-1260	1,200	25	

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	88	51-152

Field ID: G32 N(E)@4.5' Diln Fac: 8.000 Type: SAMPLE Analyzed: 09/28/07 Lab ID: 197857-008 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	66	
Aroclor-1221	ND	130	
Aroclor-1232	ND	66	
Aroclor-1242	ND	66	
Aroclor-1248	ND	66	
Aroclor-1254	3,800	66	
Aroclor-1260	2,700	66	

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	107	51-152

Field ID: G33 N(SE)@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/28/07
Lab ID: 197857-009 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	440	12	
Aroclor-1260	310	12	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	81	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 197857 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: 270025 09/25/07 09/25/07 Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 09/26/07 129909 Batch#:

Field ID: G34 BN@7' Diln Fac: 1.000
Type: SAMPLE Analyzed: 09/28/07
Lab ID: 197857-010 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	49	12	
Aroclor-1260	50	12	

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	71	51-152

Type: BLANK Analyzed: 09/27/07 Lab ID: QC407930 Cleanup Method: EPA 3665A Diln Fac: 1.000

Analyte Result RLAroclor-1016 ND 12 Aroclor-1221 24 ND Aroclor-1232 Aroclor-1242 12 ND 12 ND Aroclor-1248 ND 12 Aroclor-1254 Aroclor-1260 ND 12 12 ND

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	110	51-152

ND= Not Detected RL= Reporting Limit Page 4 of 4



		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197857		Location:	Former Larkspur Treatment Plant
Client:	Questa Engin	eering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC407	931	Batch#:	129909
Matrix:	Soil		Prepared:	09/26/07
Units:	ug/Kg		Analyzed:	09/27/07
Basis:	as re	ceived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	164.5	144.8	88	69-142
Aroclor-1260	164.5	158.8	96	69-155

Surrogate	%REC	Limits
TCMX	73	66-140
Decachlorobiphenyl	100	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #: 19	7857		Location:	Former Larkspur Treatment Plant
Client: Qu	lesta Engineerii	ng Corporation	Prep:	EPA 3550B
Project#: 27	70025		Analysis:	EPA 8082
Field ID:	ZZZZZZZZZ	7	Batch#:	129909
MSS Lab ID:	197871-003	L	Sampled:	09/20/07
Matrix:	Soil		Received:	09/21/07
Units:	ug/Kg		Prepared:	09/26/07
Basis:	as receive	ed	Analyzed:	09/27/07
Diln Fac:	1.000			

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC407932

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<3.303	164.5	171.8	104	62-139
Aroclor-1260	<3.352	164.5	153.0	93	54-143

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	88	51-152

Type: Cleanup Method: EPA 3665A

MSD QC407933 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.8	164.8	99	62-139	5	33
Aroclor-1260	165.8	150.3	91	54-143	3	34

Surrogate	%REC	Limits	
TCMX	95	66-140	
Decachlorobiphenyl	82	51-152	



CASE NARRATIVE

Laboratory number: 197879

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 09/26/07 Samples Received: 09/26/07

This hardcopy data package contains sample and QC results for three soil samples, requested for the above referenced project on 09/26/07. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197879		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	09/26/07
Units:		ug/Kg	Received:	09/26/07
Basis:		as received	Prepared:	09/26/07
Diln Fac:		1.000	Analyzed:	09/27/07
Batch#:		129909		

Field ID: H35ECORNER@2.0' Lab ID: 197879-001
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	240	12	
Aroclor-1260	260	12	

Sur	Surrogate %REC	Limits
TCMX	TCMX 79	66-140
Decachlorobir	Decachlorobiphenyl 63	51-152

Field ID: H36SESIDEWALL@2.0' Lab ID: 197879-002
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	36	12	
Aroclor-1260	40	12	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	79	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197879		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	09/26/07
Units:		ug/Kg	Received:	09/26/07
Basis:		as received	Prepared:	09/26/07
Diln Fac:		1.000	Analyzed:	09/27/07
Batch#:		129909		

Field ID: H37EB@4.0' Lab ID: 197879-003
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	76	66-140
Decachlorobiphenyl	82	51-152

Type: BLANK Cleanup Method: EPA 3665A

Lab ID: BLANK QC407930

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	110	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Bipheny	ls (PCBs)
Lab #:	197879		Location:	Former Larkspur Treatment Plant
Client:	Questa Engir	neering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC40'	7931	Batch#:	129909
Matrix:	Soil		Prepared:	09/26/07
Units:	ug/Kg	Đ.	Analyzed:	09/27/07
Basis:	as re	eceived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	164.5	144.8	88	69-142
Aroclor-1260	164.5	158.8	96	69-155

Surrogate	%REC	Limits
TCMX	73	66-140
Decachlorobiphenyl	100	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #: 1	197879		Location:	Former Larkspur Treatment Plant
Client: Q	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	129909
MSS Lab ID:	:	197871-001	Sampled:	09/20/07
Matrix:		Soil	Received:	09/21/07
Units:		ug/Kg	Prepared:	09/26/07
Basis:		as received	Analyzed:	09/27/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC407932

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<3.303	164.5	171.8	104	62-139
Aroclor-1260	<3.352	164.5	153.0	93	54-143

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	88	51-152

Type: Cleanup Method: EPA 3665A

MSD QC407933 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.8	164.8	99	62-139	5	33
Aroclor-1260	165.8	150.3	91	54-143	3	34

Surrogate	%REC	Limits	
TCMX	95	66-140	
Decachlorobiphenyl	82	51-152	



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197995		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/01/07
Units:		ug/Kg	Received:	10/01/07
Basis:		as received	Prepared:	10/02/07
Batch#:		130093		

 Field ID:
 QTP-G4E@4.5'
 Diln Fac:
 10.00

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-001
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	83	
Aroclor-1221	ND	170	
Aroclor-1232	ND	83	
Aroclor-1242	ND	83	
Aroclor-1248	ND	83	
Aroclor-1254	6,300	83	
Aroclor-1260	7,100	83	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-152

 Field ID:
 QTP-G5SE@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-002
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	48	12	
Aroclor-1260	63	12	

Surrogate	%REC	Limits
TCMX	93	66-140
Decachlorobiphenyl	90	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197995		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/01/07
Units:		ug/Kg	Received:	10/01/07
Basis:		as received	Prepared:	10/02/07
Batch#:		130093		

 Field ID:
 QTP-G6SW@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	130	12	
Aroclor-1260	150	12	

Surrogate	%REC	Limits
TCMX	87	66-140
Decachlorobiphenyl	89	51-152

Field ID: QTP-G7W@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 10/03/07
Lab ID: 197995-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	270	12	
Aroclor-1260	92	12	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	105	51-152

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	197995		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/01/07
Units:		ug/Kg	Received:	10/01/07
Basis:		as received	Prepared:	10/02/07
Batch#:		130093		

 Field ID:
 QTP-G8NW@4.5'
 Diln Fac:
 3.000

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,700	25	
Aroclor-1260	2,200	25	

Surrogate	%REC	Limits
TCMX	112	66-140
Decachlorobiphenyl	102	51-152

 Field ID:
 QTP-G9NE@4.5'
 Diln Fac:
 3.000

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,800	25	
Aroclor-1260	1,900	25	

Surrogate	%REC	Limits
TCMX	88	66-140
Decachlorobiphenyl	91	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197995		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/01/07
Units:		ug/Kg	Received:	10/01/07
Basis:		as received	Prepared:	10/02/07
Batch#:		130093		

 Field ID:
 QTP-G10N@4.5'
 Diln Fac:
 5.000

 Type:
 SAMPLE
 Analyzed:
 10/03/07

 Lab ID:
 197995-007
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	83	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	3,000	41	
Aroclor-1260	2,700	41	

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	117	51-152

Type: BLANK Analyzed: 10/02/07 Lab ID: QC408664 Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	87	66-140
Decachlorobiphenyl	111	51-152

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	197995		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC408665	Batch#:	130093
Matrix:		Soil	Prepared:	10/02/07
Units:		ug/Kg	Analyzed:	10/02/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.4	136.1	82	69-142
Aroclor-1260	166.4	172.1	103	69-155

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	117	51-152

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198181 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 Sampled: Matrix: Soil 10/08/07 Received: 10/08/07 Units: ug/Kg Prepared: Basis: as received 10/09/07 130335 Batch#:

Field ID: G35 WS@4.5 Diln Fac: 2.000
Type: SAMPLE Analyzed: 10/10/07
Lab ID: 198181-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	16	
Aroclor-1221	ND	33	
Aroclor-1232	ND	16	
Aroclor-1242	ND	16	
Aroclor-1248	ND	16	
Aroclor-1254	1,000	16	
Aroclor-1260	1,100	16	

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	92	51-152

Field ID: G36 WN COR@4.5 Diln Fac: 5.000
Type: SAMPLE Analyzed: 10/10/07
Lab ID: 198181-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	82	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	1,900	41	
Aroclor-1260	2,000	41	

Surrogate	%REC	Limits	
TCMX	101	66-140	
Decachlorobiphenyl	102	51-152	

 Field ID:
 G37 WN@4.5
 Diln Fac:
 3.000

 Type:
 SAMPLE
 Analyzed:
 10/10/07

 Lab ID:
 198181-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,400	25	
Aroclor-1260	1,800	25	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	95	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 198181 Location: Former Larkspur Treatment Plant Lab #: Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 Matrix: Soil 10/08/07 Received: Units: ug/Kg 10/08/07 as received 130335 Basis: Prepared: 10/09/07 Batch#:

Field ID: G38 BOT W@7 Diln Fac: 1.000
Type: SAMPLE Analyzed: 10/09/07
Lab ID: 198181-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	350	12	
Aroclor-1260	440	12	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	84	51-152

Field ID: G39 BOT WS@7 Diln Fac: 1.000
Type: SAMPLE Analyzed: 10/09/07
Lab ID: 198181-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	101	51-152

Field ID: G40 BOT NSW@7 Diln Fac: 1.000
Type: SAMPLE Analyzed: 10/09/07
Lab ID: 198181-006 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	580	12	
Aroclor-1260	410	12	

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	62	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 198181 Location: Former Larkspur Treatment Plant Lab #: Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 Matrix: Soil 10/08/07 Received: Units: ug/Kg 10/08/07 as received 130335 Basis: Prepared: 10/09/07 Batch#:

Field ID: G41 BOT N@7.5 Diln Fac: 1.000
Type: SAMPLE Analyzed: 10/09/07
Lab ID: 198181-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	78	12	
Aroclor-1260	79	12	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	92	51-152

 Field ID:
 G42 NW@4.5
 Diln Fac:
 5.000

 Type:
 SAMPLE
 Analyzed:
 10/10/07

 Lab ID:
 198181-008
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	82	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	1,400	41	
Aroclor-1260	1,600	41	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	92	51-152

 Field ID:
 G43 NN@4.5
 Diln Fac:
 5.000

 Type:
 SAMPLE
 Analyzed:
 10/10/07

 Lab ID:
 198181-009
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	42	
Aroclor-1221	ND	83	
Aroclor-1232	ND	42	
Aroclor-1242	ND	42	
Aroclor-1248	ND	42	
Aroclor-1254	1,500	42	
Aroclor-1260	1,600	42	

Surrogate	%REC	Limits	
TCMX	106	66-140	
Decachlorobiphenyl	111	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198181 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 1 Matrix: Soil 10/08/07 Received: 10/08/07 Units: ug/Kg as received 130335 Basis: Prepared: 10/09/07 Batch#:

Type: BLANK Analyzed: 10/09/07 QC409658 1.000 Lab ID: Cleanup Method: EPA 3665A

Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	108	51-152

2.0



		Polychlorinated	l Bipheny	ls (PCBs)
Lab #:	198181		Location:	Former Larkspur Treatment Plant
Client:	Questa Enginee	ering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC40965	59	Batch#:	130335
Matrix:	Soil		Prepared:	10/09/07
Units:	ug/Kg		Analyzed:	10/09/07
Basis:	as rece	eived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.6	156.9	95	69-142
Aroclor-1260	165.6	172.7	104	69-155

Surrogate	%REC	Limits
TCMX	81	66-140
Decachlorobiphenyl	95	51-152

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CASE NARRATIVE

Laboratory number: 198365

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 10/15/07 Samples Received: 10/15/07

This hardcopy data package contains sample and QC results for four soil samples, requested for the above referenced project on 10/15/07. The samples were received on ice and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198365 Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Project#: 270025 Batch#: Sampled: 130646 Matrix: Soil ug/Kg 10/15/07 Units: Basis: as received Received: 10/15/07 1.000 Diln Fac: Prepared: 10/17/07

Field ID: G54BOTSW@6' Analyzed: 10/19/07 Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 198365-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	190	12	
Aroclor-1260	290	12	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	89	51-152

Field ID: G55SESW@6.5' Analyzed: 10/19/07 Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 198365-002

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	36	12	
Aroclor-1260	46	12	

Surrogate	%REC	Limits
TCMX	93	66-140
Decachlorobiphenyl	82	51-152

Field ID: G56SEBOT@7' Analyzed: 10/19/07 Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 198365-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	480	12	
Aroclor-1260	730	12	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	97	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant
Prep: EPA 3550B
Analysis: EPA 8082
Batch#: 130646 Lab #: 198365 Client: Questa Engineering Corporation Project#: 270025 Matrix: Soil Sampled: 10/15/07 Units: ug/Kg as received 1.000 Basis: Received: 10/15/07 Diln Fac: Prepared: 10/17/07

G57SESE@6.5' Field ID: Analyzed: 10/19/07 Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 198365-004

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	80	12	
Aroclor-1260	150	12	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	92	51-152

Type: BLANK Analyzed: 10/18/07 Cleanup Method: EPA 3665A Lab ID: QC410976

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	115	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198365		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC410977	Batch#:	130646
Matrix:		Soil	Prepared:	10/17/07
Units:		ug/Kg	Analyzed:	10/18/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.1	167.8	101	69-142
Aroclor-1260	166.1	173.7	105	69-155

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	110	51-152

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		Polychlorinated	Biphenyl	ls (PCBs)
Lab #:	198365		Location:	Former Larkspur Treatment Plant
Client: (Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	130646
MSS Lab ID	:	198381-006	Sampled:	10/15/07
Matrix:		Soil	Received:	10/15/07
Units:		ug/Kg	Prepared:	10/17/07
Basis:		as received	Analyzed:	10/18/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC410978

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<1.131	165.6	173.4	105	62-139
Aroclor-1260	<3.245	165.6	166.2	100	54-143

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	101	51-152

Type: Cleanup Method: EPA 3665A

MSD QC410979 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.8	184.4	111	62-139	6	33
Aroclor-1260	165.8	173.5	105	54-143	4	34

Surrogate	%REC	imits	
TCMX	119	56-140	
Decachlorobiphenyl	106	51-152	



CASE NARRATIVE

Laboratory number: 198564

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 10/19/07 Samples Received: 10/19/07

This hardcopy data package contains sample and QC results for four soil samples, requested for the above referenced project on 10/19/07. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198564 Client: Prep: Questa Engineering Corporation Analysis: EPA 8082 Project#: 270025 Batch#: 130816 Matrix: Soil Sampled: 10/19/07 Units: ug/Kg Basis: as received Received: 10/19/07 Diln Fac: 1.000 Prepared: 10/23/07

Field ID: QTR-G1-N@4' Analyzed: 10/24/07 Cleanup Method: EPA 3665A SAMPLE Type: Lab ID: 198564-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	110	51-152

Field ID: QTR-G1-SW-W@5' Analyzed: 10/24/07 SAMPLE Cleanup Method: EPA 3665A Type: Lab ID: 198564-002

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	129	51-152

QTR-G2-W@6.5' 10/24/07 Field ID: Analyzed: Cleanup Method: EPA 3665A Type: SAMPLE

Lab ID: 198564-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	113	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant
Prep: EPA 3550B
Analysis: EPA 8082
Batch#: 130816 Lab #: 198564 Client: Questa Engineering Corporation Project#: 270025 Matrix: Soil Sampled: 10/19/07 Units: ug/Kg as received 1.000 Basis: Received: 10/19/07 Diln Fac: Prepared: 10/23/07

Field ID: QTR-G2-N@4.5' Analyzed: 10/24/07 SAMPLE Type: Cleanup Method: EPA 3665A

Lab ID: 198564-004

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	12	12	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	124	51-152

Type: BLANK Analyzed: 10/23/07 Lab ID: Cleanup Method: EPA 3665A QC411676

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	93	66-140
Decachlorobiphenyl	102	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198564		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC411677	Batch#:	130816
Matrix:		Soil	Prepared:	10/23/07
Units:		ug/Kg	Analyzed:	10/23/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.3	147.7	89	69-142
Aroclor-1260	166.3	164.6	99	69-155

Surrogate	%REC	Limits
TCMX	87	66-140
Decachlorobiphenyl	87	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #: 1	.98564		Location:	Former Larkspur Treatment Plant
Client: Q	uesta	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	70025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	130816
MSS Lab ID:		198326-004	Sampled:	10/12/07
Matrix:		Soil	Received:	10/12/07
Units:		ug/Kg	Prepared:	10/23/07
Basis:		as received	Analyzed:	10/23/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC411678

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.864	166.4	153.2	92	62-139
Aroclor-1260	<3.821	166.4	161.6	97	54-143

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	109	51-152

Type: Cleanup Method: EPA 3665A

MSD QC411679 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.3	145.1	87	62-139	5	33
Aroclor-1260	166.3	148.8	90	54-143	8	34

Surrogate	%REC	Limits		
TCMX	96	66-140		
Decachlorobiphenyl	100	51-152		



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198721		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/25/07
Units:		ug/Kg	Received:	10/25/07
Basis:		as received	Prepared:	10/29/07
Batch#:		131043		

 Field ID:
 G58 BOT@9.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 10/30/07

 Lab ID:
 198721-001
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	360	12	
Aroclor-1260	710	12	

Surrogate
TCMX
Decachlorobiphenyl

 Field ID:
 G59 BOT@9.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 10/30/07

 Lab ID:
 198721-002
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	160	12	
Aroclor-1260	260	12	

Surrogate	%REC	Limits
TCMX	91	66-140
Decachlorobiphenyl	81	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198721		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/25/07
Units:		ug/Kg	Received:	10/25/07
Basis:		as received	Prepared:	10/29/07
Batch#:		131043		

Diln Fac: Analyzed: Field ID: G60 BOT SEN@8' 1.000 Type: SAMPLE 10/30/07 Lab ID: 198721-003 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	140	12	
Aroclor-1260	400	12	

	Surrogate	%REC	Limits
TCMX		109	66-140
Decachlo	orobiphenyl	101	51-152

Field ID: G61 BOT SES@8' Diln Fac: 1.000 Analyzed: 10/30/07 Type: SAMPLE Lab ID: 198721-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	130	12	
Aroclor-1260	180	12	

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	111	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)	
Lab #:	198721		Location:	Former Larkspur	Treatment Plant
Client:	Questa Engineer	ing Corporation	Prep:	EPA 3550B	
Project#:	270025		Analysis:	EPA 8082	
Matrix:	Soil		Sampled:	10/25/07	
Units:	ug/Kg		Received:	10/25/07	
Basis:	as recei	ved	Prepared:	10/29/07	
Batch#:	131043				

 Field ID:
 G62 SE@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 10/30/07

 Lab ID:
 198721-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	240	12	
Aroclor-1260	450	12	

Surrogat	gate %REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	ıyl 85	51-152

 Field ID:
 G63 SE@4.5'
 Diln Fac:
 10.00

 Type:
 SAMPLE
 Analyzed:
 10/31/07

 Lab ID:
 198721-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	82	
Aroclor-1221	ND	160	
Aroclor-1232	ND	82	
Aroclor-1242	ND	82	
Aroclor-1248	ND	82	
Aroclor-1254	3,400	82	
Aroclor-1260	4,800	82	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-152

DO= Diluted Out
ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	.s (PCBs)
Lab #:	198721		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/25/07
Units:		ug/Kg	Received:	10/25/07
Basis:		as received	Prepared:	10/29/07
Batch#:		131043		

Diln Fac: Analyzed: Field ID: G64 SE@4.5' 1.000 Type: SAMPLE 10/30/07 Lab ID: 198721-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	380	12	
Aroclor-1260	680	12	

Suri	Surrogate %REC	Limits
TCMX	MX 97	66-140
Decachlorobiph	cachlorobiphenyl 80	51-152

Field ID: G65 SE@4.5' Diln Fac: 4.000 Analyzed: 10/31/07 Type: SAMPLE Lab ID: 198721-008 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	33	
Aroclor-1221	ND	66	
Aroclor-1232	ND	33	
Aroclor-1242	ND	33	
Aroclor-1248	ND	33	
Aroclor-1254	1,200	33	
Aroclor-1260	2,100	33	

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	101	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)	
Lab #:	198721		Location:	Former Larkspur	Treatment Plant
Client:	Questa Engineer:	ing Corporation	Prep:	EPA 3550B	
Project#:	270025		Analysis:	EPA 8082	
Matrix:	Soil		Sampled:	10/25/07	
Units:	ug/Kg		Received:	10/25/07	
Basis:	as recei	ved	Prepared:	10/29/07	
Batch#:	131043				

Field ID: G66 E@4.5' Diln Fac: 1.000

Type: SAMPLE Analyzed: 10/30/07

Lab ID: 198721-009 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	32	12	
Aroclor-1260	49	12	

S	Surrogate	%REC	Limits
TCMX		97	66-140
Decachlorob	robiphenyl	83	51-152

Type: BLANK Analyzed: 10/30/07
Lab ID: QC412640 Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	83	66-140
Decachlorobiphenyl	95	51-152

DO= Diluted Out ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198721		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC412641	Batch#:	131043
Matrix:		Soil	Prepared:	10/29/07
Units:		ug/Kg	Analyzed:	10/30/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	149.0	89	69-142
Aroclor-1260	166.7	163.0	98	69-155

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	105	51-152

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Polychlorinated Biphenyls (PCBs) Lab #: 198757 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: 270025 Analysis: EPA 8082 Soil Batch#: 131043 Matrix: Units: ug/Kg Sampled: 10/26/07 Basis: as received Received: 10/26/07 Diln Fac: 1.000 Prepared: 10/29/07

Field ID: G67 NE@4.5 Analyzed: 10/29/07 Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 198757-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	13	12	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	90	51-152

Field ID: G68 NE@4.5 Analyzed: 10/29/07
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 198757-002

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	120	12	
Aroclor-1260	240	12	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	85	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198757		Location:	Former Larkspur Treatment Plant
Client:	Questa Eng	gineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:	So	il	Batch#:	131043
Units:	ug,	/Kg	Sampled:	10/26/07
Basis:	as	received	Received:	10/26/07
Diln Fac:	1.0	000	Prepared:	10/29/07

Field ID: G69 N@4.5 Analyzed: 10/29/07 Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 198757-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogat
TCMX
Decachlorobiphenyl

Type: BLANK Analyzed: 10/30/07 Lab ID: QC412640 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	83	66-140
Decachlorobiphenyl	95	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198757		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC412641	Batch#:	131043
Matrix:		Soil	Prepared:	10/29/07
Units:		ug/Kg	Analyzed:	10/30/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	149.0	89	69-142
Aroclor-1260	166.7	163.0	98	69-155

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	105	51-152

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CASE NARRATIVE

Laboratory number: 198873

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 10/31/07 Samples Received: 10/31/07

This hardcopy data package contains sample and QC results for three soil samples, requested for the above referenced project on 10/31/07. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198873		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/31/07
Units:		ug/Kg	Received:	10/31/07
Basis:		as received	Prepared:	11/01/07
Batch#:		131185		

 Field ID:
 G70@8.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/01/07

 Lab ID:
 198873-001
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	200	12	
Aroclor-1260	190	12	

Surr	Surrogate %REC	Limits
TCMX	MX 107	66-140
Decachlorobiph	cachlorobiphenyl 92	51-152

 Field ID:
 G71@9.5'
 Diln Fac:
 2.000

 Type:
 SAMPLE
 Analyzed:
 11/02/07

 Lab ID:
 198873-002
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	17	
Aroclor-1221	ND	33	
Aroclor-1232	ND	17	
Aroclor-1242	ND	17	
Aroclor-1248	ND	17	
Aroclor-1254	1,000	17	
Aroclor-1260	930	17	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	114	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198873		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	10/31/07
Units:		ug/Kg	Received:	10/31/07
Basis:		as received	Prepared:	11/01/07
Batch#:		131185		

 Field ID:
 G72@8'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/01/07

 Lab ID:
 198873-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	330	12	
Aroclor-1260	410	12	

Surrogate
TCMX
Decachlorobiphenyl

Type: BLANK Analyzed: 11/01/07 Lab ID: QC413207 Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	110	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198873		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC413208	Batch#:	131185
Matrix:		Soil	Prepared:	11/01/07
Units:		ug/Kg	Analyzed:	11/01/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.4	203.3	123	69-142
Aroclor-1260	165.4	212.0	128	69-155

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	112	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #: 1	198873		Location:	Former Larkspur Treatment Plant
Client: Q	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	131185
MSS Lab ID:	:	198838-011	Sampled:	10/30/07
Matrix:		Soil	Received:	10/31/07
Units:		ug/Kg	Prepared:	11/01/07
Basis:		as received	Analyzed:	11/02/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC413209

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<1.130	164.7	187.5	114	62-139
Aroclor-1260	560.6	164.7	742.8	111	54-143

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	102	51-152

Type: Cleanup Method: EPA 3665A

MSD QC413210 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.0	201.9	122	62-139	7	33
Aroclor-1260	165.0	718.4	96	54-143	3	34

	Surrogate	%REC	Limits
	rcmx	115	66-140
I	Decachlorobiphenyl	111	51-152



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198906 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 Sampled: Matrix: Soil 11/01/07 Received: 11/01/07 Units: ug/Kg Basis: as received Prepared: 11/02/07 Batch#: 131254

Field ID: QTP CL#3-1@3' Diln Fac: 5.000 Type: SAMPLE Analyzed: 11/03/07 Lab ID: 198906-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	82	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	2,000	41	
Aroclor-1260	2,200	41	

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	121	51-152

Field ID: QTP CL#3-1@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/03/07
Lab ID: 198906-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	92	66-140
Decachlorobiphenyl	82	51-152

Field ID: QTP CL#3-1@6' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/03/07
Lab ID: 198906-003 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	121	66-140
Decachlorobiphenyl	113	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 198906 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Matrix: Soil 11/01/07 Received: 11/01/07 Units: ug/Kg as received 131254 Basis: Prepared: 11/02/07 Batch#:

Field ID: QTP CL#3-2@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/03/07
Lab ID: 198906-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	109	51-152

 Field ID:
 QTP CL#3-2@3'
 Diln Fac:
 5.000

 Type:
 SAMPLE
 Analyzed:
 11/03/07

 Lab ID:
 198906-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	83	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	2,100	41	
Aroclor-1260	2,700	41	

Surrogate	%REC	Limits
TCMX	93	66-140
Decachlorobiphenyl	117	51-152

Type: BLANK Analyzed: 11/02/07 Lab ID: QC413485 Cleanup Method: EPA 3665A Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	115	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyls	s (PCBs)
Lab #:	198906		Location: I	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep: I	EPA 3550B
Project#:	270025		Analysis: H	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC413486	Batch#:	131254
Matrix:		Soil	Prepared:	11/02/07
Units:		ug/Kg	Analyzed:	11/02/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.5	202.3	122	69-142
Aroclor-1260	165.5	205.3	124	69-155

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	104	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #: 198	8906		Location:	Former Larkspur Treatment Plant
Client: Que	esta Engineerin	g Corporation	Prep:	EPA 3550B
Project#: 27	0025		Analysis:	EPA 8082
Field ID:	ZZZZZZZZZ		Batch#:	131254
MSS Lab ID:	198916-005		Sampled:	11/01/07
Matrix:	Soil		Received:	11/02/07
Units:	ug/Kg		Prepared:	11/02/07
Basis:	as receive	d	Analyzed:	11/02/07
Diln Fac:	1.000			

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC413487

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<1.137	165.8	193.1	116	62-139
Aroclor-1260	14.76	165.8	221.7	125	54-143

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	102	51-152

Type: Cleanup Method: EPA 3665A

MSD QC413488 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.6	203.5	122	62-139	5	33
Aroclor-1260	166.6	220.4	123	54-143	1	34

Surrogate	%REC	Limits	
TCMX	106	66-140	
Decachlorobiphenyl	94	51-152	



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198907 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 Batch#: Matrix: Soil 131254 Sampled: 11/01/07 Units: ug/Kg Basis: as received Received: 11/01/07 1.000 Diln Fac: Prepared: 11/02/07

Field ID: G73@11.5' Analyzed: 11/03/07 Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 198907-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	52	12	
Aroclor-1260	66	12	

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	105	51-152

Field ID: G74@11.5' Analyzed: 11/03/07 Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 198907-002

RLResult Analyte Aroclor-1016 ND Aroclor-1221 24 ND Aroclor-1232 12 ND Aroclor-1242 ND 12 Aroclor-1248 12 ND Aroclor-1254 34 12 Aroclor-1260 51

	Surrogate	%REC	Limits
TCMX		98	66-140
	lorobiphenyl	97	51-152

Type: BLANK Analyzed: 11/02/07 Lab ID: QC413485 Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits	
TCMX	113	66-140	
Decachlorobiphenyl	115	51-152	

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198907		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC413486	Batch#:	131254
Matrix:		Soil	Prepared:	11/02/07
Units:		ug/Kg	Analyzed:	11/02/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.5	202.3	122	69-142
Aroclor-1260	165.5	205.3	124	69-155

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	104	51-152

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CASE NARRATIVE

Laboratory number: 198950

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/02/07 Samples Received: 11/02/07

This hardcopy data package contains sample and QC results for thirteen soil samples, requested for the above referenced project on 11/02/07. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 198950 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 11/02/07 11/02/07 Sampled: Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 11/05/07 Batch#: 131336

Field ID: QTP BF#3-1@3' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/06/07
Lab ID: 198950-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	100	12	
Aroclor-1260	79	12	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	91	51-152

Field ID: QTP BF#3-1@5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/06/07
Lab ID: 198950-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	127	66-140
Decachlorobiphenyl	114	51-152

Field ID: QTP BF#3-2@3' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/06/07
Lab ID: 198950-003 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	39	12	
Aroclor-1260	57	12	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	96	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 198950 Location: Former Larkspur Treatment Plant Lab #: Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 11/02/07 Matrix: Soil Received: 11/02/07 Units: ug/Kg Basis: as received Prepared: 11/05/07 Batch#: 131336

Field ID: QTP BF#3-2@5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/06/07
Lab ID: 198950-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	85	51-152

 Field ID:
 QTP BF#3-3@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/06/07

 Lab ID:
 198950-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	290	12	
Aroclor-1260	370	12	

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	74	51-152

Field ID: QTP BF#3-3@6' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198950-006 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	22	12	
Aroclor-1260	17	12	

Surrogate	%REC	Limits	
TCMX	109	66-140	
Decachlorobiphenyl	76	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 198950 Location: Former Larkspur Treatment Plant Lab #: Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 11/02/07 Matrix: Soil Received: 11/02/07 Units: ug/Kg Basis: as received Prepared: 11/05/07 Batch#: 131336

Field ID: QTP BF#3-4@3' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198950-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	430	12	
Aroclor-1260	320	12	

Surrogate	%REC	Limits
TCMX	118	66-140
Decachlorobiphenyl	87	51-152

Field ID: QTP BF#3-4@5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198950-008 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	95	51-152

Field ID: QTP BF#1-1@3' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198950-009 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	130	12	
Aroclor-1260	170	12	

Surrogate	%REC	Limits	
TCMX	120	66-140	
Decachlorobiphenyl	89	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 198950 Location: Former Larkspur Treatment Plant Questa Engineering Corporation Client: EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 11/02/07 Matrix: Soil Received: 11/02/07 Units: ug/Kg Basis: as received Prepared: 11/05/07 Batch#: 131336

Field ID: QTP BF#1-1@4' Diln Fac: 3.000
Type: SAMPLE Analyzed: 11/08/07
Lab ID: 198950-010 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,400	25	
Aroclor-1260	2,000	25	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	112	51-152

 Field ID:
 QTP BF#1-1@5.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/07/07

 Lab ID:
 198950-011
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	107	51-152

Field ID: QTP BF#2-1@3' Diln Fac: 5.000
Type: SAMPLE Analyzed: 11/08/07
Lab ID: 198950-012 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	83	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	2,100	41	
Aroclor-1260	2,000	41	

Surrogate	%REC	Limits	
TCMX	107	66-140	
Decachlorobiphenyl	101	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 198950 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Project#: 270025 Soil Matrix: 11/02/07 Received: 11/02/07 Units: ug/Kg Basis: as received Prepared: 11/05/07 Batch#: 131336

Field ID: QTP BF#2-1@5' Diln Fac: 1.000 11/07/07 Type: SAMPLE Analyzed: Lab ID: 198950-013 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	88	51-152

Type: BLANK Analyzed: 11/06/07 QC413804 Lab ID: Cleanup Method: EPA 3665A $\tilde{1}.000$ Diln Fac:

Analyte Result RLAroclor-1016 ND 12 Aroclor-1221 24 ND Aroclor-1232 Aroclor-1242 12 ND 12 ND Aroclor-1248 ND 12 Aroclor-1254 Aroclor-1260 ND 12 12 ND

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	109	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198950		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC413805	Batch#:	131336
Matrix:		Soil	Prepared:	11/05/07
Units:		ug/Kg	Analyzed:	11/06/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.1	192.2	116	69-142
Aroclor-1260	166.1	211.8	128	69-155

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	105	51-152

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 198950		Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: 270025		Analysis: EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#: 131336
MSS Lab ID:	198970-032	Sampled: 11/05/07
Matrix:	Soil	Received: 11/05/07
Units:	ug/Kg	Prepared: 11/05/07
Basis:	as received	Analyzed: 11/06/07
Diln Fac:	1.000	

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC413806

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<1.132	165.3	195.6	118	62-139
Aroclor-1260	3.507	165.3	167.1	99	54-143

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	78	51-152

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC413807

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.1	205.7	124	62-139	5	33
Aroclor-1260	166.1	178.4	105	54-143	6	34

Surrogate	%REC	Limits	
TCMX	116	66-140	
Decachlorobiphenyl	79	51-152	



CASE NARRATIVE

Laboratory number: 198980

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/05/07 Samples Received: 11/05/07

This hardcopy data package contains sample and QC results for eleven soil samples, requested for the above referenced project on 11/05/07. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

High surrogate recovery was observed for decachlorobiphenyl in QTPPL-1@5.5' (lab # 198980-009); the corresponding TCMX surrogate recovery was within limits, and no target analytes were detected in the sample. No other analytical problems were encountered.



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198980		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	11/05/07
Units:		ug/Kg	Received:	11/05/07
Basis:		as received	Prepared:	11/06/07
Batch#:		131384		

 Field ID:
 QTPCL#1-1@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/07/07

 Lab ID:
 198980-001
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
CMX	106	66-140
I CI-IZI	100	00 110
Decachlorobiphenyl	122	51-152

Field ID: QTPCL#1-1@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198980-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	76	12	
Aroclor-1260	98	12	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	118	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

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ND= Not Detected

RL= Reporting Limit



2.0

		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198980		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	11/05/07
Units:		ug/Kg	Received:	11/05/07
Basis:		as received	Prepared:	11/06/07
Batch#:		131384		

Field ID: QTPCL#1-1@6' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198980-003 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	160	12	
Aroclor-1260	220	12	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	110	51-152

 Field ID:
 QTPSD1@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/07/07

 Lab ID:
 198980-004
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	48	12	
Aroclor-1260	35	12	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	103	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinat	ed Biphenyls	s (PCBs)	
Lab #:	198980		Location:	Former Larkspur	Treatment Plant
Client:	Questa Engine	eering Corporation	Prep:	EPA 3550B	
Project#:	270025		Analysis:	EPA 8082	
Matrix:	Soil		Sampled:	11/05/07	
Units:	ug/Kg		Received:	11/05/07	
Basis:	as red	ceived	Prepared:	11/06/07	
Batch#:	131384	4			

 Field ID:
 QTPSD1@5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/08/07

 Lab ID:
 198980-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	22	12	
Aroclor-1260	29	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	112	51-152

 Field ID:
 QTPAZ-1@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/07/07

 Lab ID:
 198980-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	142	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198980		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	11/05/07
Units:		ug/Kg	Received:	11/05/07
Basis:		as received	Prepared:	11/06/07
Batch#:		131384		

Diln Fac: Analyzed: Field ID: QTPAZ-1@4.5' 1.000 Type: SAMPLE 11/08/07 Lab ID: 198980-007 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Su	Surrogate %REC	Limits
TCMX	MX 110	66-140
Decachlorobi	ecachlorobiphenyl 116	51-152

Field ID: QTPPL-1@3' Diln Fac: 1.000 SAMPLE Analyzed: 11/08/07 Type: Lab ID: 198980-008 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	220	12	
Aroclor-1260	580	12	

Surrogate	%REC	Limits
TCMX	118	66-140
Decachlorobiphenyl	122	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	198980		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	11/05/07
Units:		ug/Kg	Received:	11/05/07
Basis:		as received	Prepared:	11/06/07
Batch#:		131384		

 Field ID:
 QTPPL-1@5.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/07/07

 Lab ID:
 198980-009
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate
TCMX
Decachlorobiphenyl

Field ID: QTPCL#1-1@8' Diln Fac: 100.0

Type: SAMPLE Analyzed: 11/07/07

Lab ID: 198980-010 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	830	
Aroclor-1221	ND	1,700	
Aroclor-1232	ND	830	
Aroclor-1242	ND	830	
Aroclor-1248	ND	830	
Aroclor-1254	15,000	830	
Aroclor-1260	38,000	830	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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	Polyc	hlorinated Biphenyls (PCBs)	
Lab #:	198980	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corp	ration Prep: EPA 3550B	
Project#:	270025	Analysis: EPA 8082	
Matrix:	Soil	Sampled: 11/05/07	
Units:	ug/Kg	Received: 11/05/07	
Basis:	as received	Prepared: 11/06/07	
Batch#:	131384		

Field ID: QTPCL#1-1@10' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/07/07
Lab ID: 198980-011 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	24	12	
Aroclor-1260	34	12	

Type: BLANK Analyzed: 11/07/07 Lab ID: QC413992 Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	108	51-152

^{*=} Value outside of QC limits; see narrative

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	198980		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC413993	Batch#:	131384
Matrix:		Soil	Prepared:	11/06/07
Units:		ug/Kg	Analyzed:	11/07/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.1	152.5	92	69-142
Aroclor-1260	165.1	162.4	98	69-155

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	101	51-152

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 198980		Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: 270025		Analysis: EPA 8082
Field ID:	ZZZZZZZZZZ	Diln Fac: 1.000
MSS Lab ID:	198790-002	Batch#: 131384
Matrix:	Soil	Sampled: 10/29/07
Units:	ug/Kg	Received: 10/29/07
Basis:	as received	Prepared: 11/06/07

Type: MS Analyzed: 11/08/07 Lab ID: QC413994 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<3.304	166.5	172.7	104	62-139
Aroclor-1260	7.559	166.5	160.9	92	54-143

Surrogate	%REC	Limits
TCMX	72	66-140
Decachlorobiphenyl	81	51-152

Type: MSD Analyzed: 11/09/07
Lab ID: QC413995 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.6	176.7	107	62-139	3	33
Aroclor-1260	165.6	170.2	98	54-143	6	34

Surrogate	%REC	Limits
TCMX	77	66-140
. CP121	, ,	00 110
Decachlorobiphenyl	85	51-152

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CASE NARRATIVE

Laboratory number: 199052

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/07/07 Samples Received: 11/07/07

This hardcopy data package contains sample and QC results for nine soil samples, requested for the above referenced project on 11/07/07. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 199052 Questa Engineering Corporation Prep: Client: Analysis: EPA 8082 Diln Fac: 1 270025 Project#: 1.000 Matrix: Soil Sampled: 11/07/07 Units: ug/Kg Basis: as received Received: 11/07/07

QTP-PP-1@3' Field ID: Prepared: 11/10/07 Type: SAMPLE Analyzed: 11/12/07 Lab ID: 199052-001 EPA 3665A Cleanup Method:

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	700	12	
Aroclor-1260	580	12	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	98	51-152

Field ID: QTP-PP-1@5' Prepared: 11/10/07 SAMPLE 11/12/07 Type: Analyzed: Lab ID: 199052-002 Cleanup Method: EPA 3665A Batch#: 131568

Analyte Result RLAroclor-1016 ND 12 Aroclor-1221 24 ND Aroclor-1232 ND 12 Aroclor-1242 $\overline{12}$ ND Aroclor-1248 ND 12 280 12 Aroclor-1254 Aroclor-1260 220

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	98	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 199052 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Diln Fac: 1 1.000 Matrix: Soil 11/07/07 Units: ug/Kg Sampled: Basis: as received Received: 11/07/07

Field ID: QTP-PP-1@6.5' Prepared: 11/10/07 SAMPLE 11/12/07 Type: Analyzed: Lab ID: 199052-003 Cleanup Method: EPA 3665A

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	400	12	
Aroclor-1260	340	12	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	86	51-152

11/10/07 Field ID: QTP-PP-1@8' Prepared: Type: 11/12/07 SAMPLE Analyzed: Lab ID: 199052-004 Cleanup Method: EPA 3665A

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	87	12	
Aroclor-1260	73	12	

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	81	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 199052 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Diln Fac: 1 1.000 Matrix: Soil 11/07/07 Units: ug/Kg Sampled: Basis: as received Received: 11/07/07

Field ID: QTP CL#3-3@3' Prepared: 11/10/07 SAMPLE 11/12/07 Type: Analyzed: Lab ID: 199052-005 Cleanup Method: EPA 3665A

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	110	51-152

11/10/07 Field ID: QTP CL#3-3@5' Prepared: 11/12/07 Type: SAMPLE Analyzed: Lab ID: 199052-006 Cleanup Method: EPA 3665A

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	106	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 199052 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Diln Fac: 1 1.000 Matrix: Soil 11/07/07 Units: ug/Kg Sampled: Basis: as received Received: 11/07/07

Field ID: QTP OS-1@3' Prepared: 11/10/07 SAMPLE 11/13/07 Type: Analyzed: Lab ID: 199052-007 Cleanup Method: EPA 3665A

Batch#: 131568

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
CMX	95	66-140
	70	F1 1F2
Decachlorobiphenyl	78	51-T5Z

11/12/07 Field ID: QTP OS-1@5' Prepared: 11/13/07 Type: SAMPLE Analyzed: Lab ID: 199052-008 Cleanup Method: EPA 3665A

Batch#: 131599

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	59	12	
Aroclor-1260	67	12	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	92	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 199052 Location: Former Larkspur Treatment Plant Questa Engineering Corporation Client: Prep: EPA 3550B Analysis: EPA 8082 Diln Fac: 1 Project#: 270025 Soil Matrix: 1.000 11/07/07 Units: ug/Kg Sampled: Basis: as received Received: 11/07/07

Field ID: QTP OS-1@7' Prepared: 11/12/07 Type: SAMPLE Analyzed: 11/13/07 Lab ID: 199052-009 Cleanup Method: EPA 3665A

Batch#: 131599

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	25	12	
Aroclor-1260	22	12	

Surrogate	%REC	Limits
TCMX	131	66-140
Decachlorobiphenyl	130	51-152

Type: BLANK Prepared: 11/10/07 Lab ID: QC414780 Analyzed: 11/11/07 Batch#: 131568 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	108	51-152

Type: BLANK Prepared: 11/12/07 Lab ID: QC414872 Analyzed: 11/12/07 Batch#: 131599 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	123	66-140	
Decachlorobiphenyl	107	51-152	

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199052		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC414781	Batch#:	131568
Matrix:		Soil	Prepared:	11/10/07
Units:		ug/Kg	Analyzed:	11/11/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.1	155.3	94	69-142
Aroclor-1260	165.1	145.2	88	69-155

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	97	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199052		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Field ID:		QTP CL#3-3@3'	Batch#:	131568
MSS Lab ID	:	199052-005	Sampled:	11/07/07
Matrix:		Soil	Received:	11/07/07
Units:		ug/Kg	Prepared:	11/10/07
Basis:		as received	Analyzed:	11/13/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC414782

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.871	168.2	149.5	89	62-139
Aroclor-1260	<3.831	168.2	139.9	83	54-143

Surrogate	%REC	Limits
TCMX	88	66-140
Decachlorobiphenyl	75	51-152

Type: Cleanup Method: EPA 3665A

MSD QC414783 Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.3	138.2	83	62-139	7	33
Aroclor-1260	166.3	132.3	80	54-143	5	34

Surrogate	%REC	Limits	
TCMX	90	66-140	
Decachlorobiphenyl	76	51-152	



		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199052		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC414876	Batch#:	131599
Matrix:		Soil	Prepared:	11/12/07
Units:		ug/Kg	Analyzed:	11/12/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	164.9	143.5	87	69-142
Aroclor-1260	164.9	155.4	94	69-155

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	105	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199052		Location:	Former Larkspur Treatment Plant
Client: (Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: 2	270025		Analysis:	EPA 8082
Field ID:		ZZZZZZZZZ	Batch#:	131599
MSS Lab ID	:	199089-004	Sampled:	11/08/07
Matrix:		Soil	Received:	11/08/07
Units:		ug/Kg	Prepared:	11/12/07
Basis:		as received	Analyzed:	11/13/07
Diln Fac:		1.000		

MS Type: Cleanup Method: EPA 3665A

Lab ID: QC414877

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<0.9072	166.4	171.1	103	62-139
Aroclor-1260	<2.604	166.4	156.9	94	54-143

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	92	51-152

Type: MSD QC414878 Cleanup Method: EPA 3665A

Lab ID:

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.3	167.3	101	62-139	2	33
Aroclor-1260	166.3	146.4	88	54-143	7	34

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	92	51-152



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	199092		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Batch#:	131533
Units:		ug/Kg	Sampled:	11/08/07
Basis:		as received	Received:	11/08/07
Diln Fac:		1.000	Prepared:	11/09/07

Field ID: QTP CL#3-3@7' Analyzed: 11/10/07 Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 199092-001

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	28	12	
Aroclor-1260	31	12	

Sur	Surrogate %REC	Limits
TCMX	110	66-140
Decachlorobig	hlorobiphenyl 69	51-152

Field ID: QTP CL#3-3@9' Analyzed: 11/10/07
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 199092-002

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	49	12	
Aroclor-1260	16	12	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	88	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	199092		Location:	Former Larkspur Treatment Plant
Client:	Questa E	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:	S	Soil	Batch#:	131533
Units:	υ	ıg/Kg	Sampled:	11/08/07
Basis:	a	as received	Received:	11/08/07
Diln Fac:	1	1.000	Prepared:	11/09/07

Field ID: G76B@10' Analyzed: 11/10/07
Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 199092-003

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

	Surrogate	%REC	Limits
CMX	J	111	66-140
	robiphenyl	108	51-152

Type: BLANK Analyzed: 11/09/07 Lab ID: QC414637 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	93	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199092		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC414638	Batch#:	131533
Matrix:		Soil	Prepared:	11/09/07
Units:		ug/Kg	Analyzed:	11/09/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.6	200.2	120	69-142
Aroclor-1260	166.6	216.2	130	69-155

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	105	51-152

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CASE NARRATIVE

Laboratory number: 199169

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/09/07 Samples Received: 11/09/07

This hardcopy data package contains sample and QC results for six soil samples, requested for the above referenced project on 11/09/07. The samples were received intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

High recoveries were observed for Aroclor-1260 in the MS/MSD of QTP-OS-2@3' (lab # 199170-003); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 199169 Client: Questa Engineering Corporation Prep: Project#: 270025 Analysis: EPA 8082 Sampled: Received: 11/09/07 11/09/07 Matrix: Soil Units: ug/Kg Basis: as received Prepared: 11/13/07 <u>1316</u>81 Batch#:

Field ID: G77NW@4.5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/14/07
Lab ID: 199169-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	120	12	
Aroclor-1260	130	12	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	91	51-152

Field ID: G78NW@9' Diln Fac: 5.000
Type: SAMPLE Analyzed: 11/15/07
Lab ID: 199169-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	41	
Aroclor-1221	ND	83	
Aroclor-1232	ND	41	
Aroclor-1242	ND	41	
Aroclor-1248	ND	41	
Aroclor-1254	3,400	41	
Aroclor-1260	2,100	41	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	109	51-152

 Field ID:
 G79WN@4.5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/14/07

 Lab ID:
 199169-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	92	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 199169 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Matrix: Soil 11/09/07 Received: 11/09/07 Units: ug/Kg as received Basis: Prepared: 11/13/07 Batch#: 131681

Field ID: G80WN@9.0' Diln Fac: 3.000 Type: SAMPLE Analyzed: 11/15/07 Lab ID: 199169-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,400	25	
Aroclor-1260	1,400	25	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	89	51-152

Field ID: G81WBOT@10' Diln Fac: 3.000
Type: SAMPLE Analyzed: 11/15/07
Lab ID: 199169-005 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	49	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,600	25	
Aroclor-1260	1,300	25	

Surrogate	%REC	Limits
TCMX	120	66-140
Decachlorobiphenyl	110	51-152

 Field ID:
 G82NBOT@5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/15/07

 Lab ID:
 199169-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	520	12	
Aroclor-1248	ND	12	
Aroclor-1254	450	12	
Aroclor-1260	370	12	

Surrogate	%REC	Limits	
TCMX	114	66-140	
Decachlorobiphenyl	92	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 199169 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 1 Matrix: Soil 11/09/07 Received: 11/09/07 Units: ug/Kg Basis: as received Prepared: 11/13/07 Batch#: 131681

Type: BLANK Analyzed: 11/14/07 QC415216 1.000 Lab ID: Cleanup Method: EPA 3665A

Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	94	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199169		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC415217	Batch#:	131681
Matrix:		Soil	Prepared:	11/13/07
Units:		ug/Kg	Analyzed:	11/14/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.0	139.0	84	69-142
Aroclor-1260	165.0	143.4	87	69-155

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	107	51-152

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		P	olychlorinated	Biphenyl	s (PCBs)
Lab #:	199169			Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering	Corporation	Prep:	EPA 3550B
Project#:	270025			Analysis:	EPA 8082
Field ID:		QTP-OS-2@3'		Batch#:	131681
MSS Lab ID	:	199170-003		Sampled:	11/09/07
Matrix:		Soil		Received:	11/09/07
Units:		ug/Kg		Prepared:	11/13/07
Basis:		as received		Analyzed:	11/15/07
Diln Fac:		2.000			

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC415218

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.921	169.1	161.3	95	62-139
Aroclor-1260	641.5	169.1	1,170	313 *	54-143

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	103	51-152

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC415219

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.3	142.3	86	62-139	10	33
Aroclor-1260	165.3	990.2	211 *	54-143	16	34

Surrogate	%REC	Limits		
TCMX	109	66-140		
Decachlorobiphenyl	90	51-152		

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^{*=} Value outside of QC limits; see narrative RPD= Relative Percent Difference



CASE NARRATIVE

Laboratory number: 199170

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/09/07 Samples Received: 11/09/07

This hardcopy data package contains sample and QC results for six soil samples, requested for the above referenced project on 11/09/07. The samples were received intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

High recoveries were observed for Aroclor-1260 in the MS/MSD of QTP-OS-2@3' (lab # 199170-003); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 199170 Questa Engineering Corporation Client: Prep: Project#: 270025 Analysis: EPA 8082 11/09/07 11/09/07 Sampled: Matrix: Soil Received: Units: ug/Kg Basis: as received Prepared: 11/13/07 Batch#: 131681

Field ID: QTP-BF#2-2@3' Diln Fac: 3.000
Type: SAMPLE Analyzed: 11/15/07
Lab ID: 199170-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	25	
Aroclor-1221	ND	50	
Aroclor-1232	ND	25	
Aroclor-1242	ND	25	
Aroclor-1248	ND	25	
Aroclor-1254	1,600	25	
Aroclor-1260	1,600	25	

Surrogate	%REC	Limits
TCMX	134	66-140
Decachlorobiphenyl	108	51-152

Field ID: QTP-BF#2-2@5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/15/07
Lab ID: 199170-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	107	51-152

 Field ID:
 QTP-OS-2@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/14/07

 Lab ID:
 199170-003
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	730	12	
Aroclor-1260	640	12	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	86	51-152

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 199170 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation Project#: 270025 EPA 3550B Prep: Analysis: EPA 8082 Sampled: 1 Matrix: Soil 11/09/07 Received: 11/09/07 Units: ug/Kg as received Basis: Prepared: 11/13/07 Batch#: 131681

Field ID: QTP-OS-2@5' Diln Fac: 1.000
Type: SAMPLE Analyzed: 11/15/07
Lab ID: 199170-004 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	32	12	
Aroclor-1260	25	12	

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	90	51-152

 Field ID:
 QTP-SLT-1@3'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/15/07

 Lab ID:
 199170-005
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	97	51-152

 Field ID:
 QTP-SLT-1@5'
 Diln Fac:
 1.000

 Type:
 SAMPLE
 Analyzed:
 11/15/07

 Lab ID:
 199170-006
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	108	66-140	
Decachlorobiphenyl	106	51-152	

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 199170 Client: Questa Engineering Corporation Project#: 270025 Analysis: EPA 8082 Sampled: 1 Matrix: Soil 11/09/07 Received: 11/09/07 Units: ug/Kg Basis: as received Prepared: 11/13/07 Batch#: 131681

Type: BLANK Analyzed: 11/14/07 OC415216 1.000 Lab ID: Cleanup Method: EPA 3665A

Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	94	51-152

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199170		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:		LCS	Diln Fac:	1.000
Lab ID:		QC415217	Batch#:	131681
Matrix:		Soil	Prepared:	11/13/07
Units:		ug/Kg	Analyzed:	11/14/07
Basis:		as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	165.0	139.0	84	69-142
Aroclor-1260	165.0	143.4	87	69-155

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	107	51-152

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			Polychlorinated	Biphenyl	s (PCBs)
Lab #:	199170			Location:	Former Larkspur Treatment Plant
Client: 0	Questa	Engineering	Corporation	Prep:	EPA 3550B
Project#:	270025			Analysis:	EPA 8082
Field ID:		QTP-OS-2@3'		Batch#:	131681
MSS Lab ID	:	199170-003		Sampled:	11/09/07
Matrix:		Soil		Received:	11/09/07
Units:		ug/Kg		Prepared:	11/13/07
Basis:		as received		Analyzed:	11/15/07
Diln Fac:		2.000			

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC415218

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.921	169.1	161.3	95	62-139
Aroclor-1260	641.5	169.1	1,170	313 *	54-143

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	103	51-152

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC415219

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.3	142.3	86	62-139	10	33
Aroclor-1260	165.3	990.2	211 *	54-143	16	34

Surrogate	%REC	Limits		
TCMX	109	66-140		
Decachlorobiphenyl	90	51-152		

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^{*=} Value outside of QC limits; see narrative RPD= Relative Percent Difference



CASE NARRATIVE

Laboratory number: 199209

Client: Questa Engineering Corporation

Project: 270025

Location: Former Larkspur Treatment Plant

Request Date: 11/13/07 Samples Received: 11/13/07

This hardcopy data package contains sample and QC results for three soil samples, requested for the above referenced project on 11/13/07. The samples were received on ice and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Matrix spikes were not reported for this analysis because the parent sample required a dilution that would have diluted out the spikes. No analytical problems were encountered.



		Polychlorinated	Biphenyl	s (PCBs)
Lab #:	199209		Location:	Former Larkspur Treatment Plant
Client:	Questa E	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:	S	Soil	Sampled:	11/13/07
Units:	ι	ug/Kg	Received:	11/13/07
Basis:	ā	as received	Prepared:	11/14/07
Diln Fac:	1	1.000	Analyzed:	11/15/07
Batch#:	1	131734		

Field ID: G83@10' Lab ID: 199209-001
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	200	12	
Aroclor-1260	300	12	

Surrogate	%REC	Limits
TCMX	122	66-140
Decachlorobiphenyl	132	51-152

Field ID: G84@11.5' Lab ID: 199209-002
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	121	66-140
Decachlorobiphenyl	117	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	Ls (PCBs)
Lab #:	199209		Location:	Former Larkspur Treatment Plant
Client:	Questa	Engineering Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Matrix:		Soil	Sampled:	11/13/07
Units:		ug/Kg	Received:	11/13/07
Basis:		as received	Prepared:	11/14/07
Diln Fac:		1.000	Analyzed:	11/15/07
Batch#:		131734		

 Field ID:
 G85@5'
 Lab ID:
 199209-003

 Type:
 SAMPLE
 Cleanup Method:
 EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	200	12	
Aroclor-1260	200	12	

Type: BLANK Cleanup Method: EPA 3665A

Type: BLANK Lab ID: QC415437

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	88	51-152

ND= Not Detected RL= Reporting Limit

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		Polychlorinated	Biphenyl	ls (PCBs)
Lab #:	199209		Location:	Former Larkspur Treatment Plant
Client:	Questa Enginee	ring Corporation	Prep:	EPA 3550B
Project#:	270025		Analysis:	EPA 8082
Type:	LCS		Diln Fac:	1.000
Lab ID:	QC41543	8	Batch#:	131734
Matrix:	Soil		Prepared:	11/14/07
Units:	ug/Kg		Analyzed:	11/15/07
Basis:	as rece	ived		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.2	133.9	81	69-142
Aroclor-1260	166.2	167.4	101	69-155

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	90	51-152

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CASE NARRATIVE

Laboratory number: 201057

Client: Questa Engineering Corporation
Location: Former Larkspur Treatment Plant

Request Date: 02/07/08 Samples Received: 02/07/08

This hardcopy data package contains sample and QC results for twenty three soil samples, requested for the above referenced project on 02/07/08. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082) Soil:

Low surrogate recoveries were observed for TCMX in QTP-08-08@20" (lab # 201057-002) and QTP-08-18@5' (lab # 201057-007); the corresponding decachlorobiphenyl surrogate recoveries were within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082) WET Leachate:

No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs)

Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201057

Client: Questa Engineering Corporation Prep: Project#: STANDARD Analysis: EPA 8082

Sampled: Matrix: Soil 02/07/08 ug/Kg 02/07/08 Units: Received: Diln Fac: 1.000

QTP-08-08@20" Field ID: Batch#: 134648 Type: SAMPLE Prepared: 02/09/08 Lab ID: 02/11/08 201057-002 Analyzed: Basis: dry Cleanup Method: EPA 3665A

13% Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	490	14	
Aroclor-1260	680	14	

	Surrogate	%REC	Limits
TCMX		48 *	66-140
Deca	chlorobiphenyl	55	51-150

QTP-08-08@42" Field ID: Batch#: 134648 02/09/08 Type: SAMPLE Prepared: Lab ID: 201057-003 Analyzed: 02/11/08 Basis: Cleanup Method: EPA 3665A dry

Moisture: 21%

Analyte	Result	RL
Aroclor-1016	ND	15
Aroclor-1221	ND	30
Aroclor-1232	ND	15
Aroclor-1242	ND	15
Aroclor-1248	ND	15
Aroclor-1254	ND	15
Aroclor-1260	ND	15

	Surrogate	%REC	Limits
TCMX		71	66-140
_		79	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) 201057 Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Soil Matrix: 02/07/08 Units: ug/Kg Received: 02/07/08 Diln Fac: 1.000

QTP-08-08 INNER@12" Field ID: Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-004 Analyzed: 02/11/08 dry 12% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	390	14	
Aroclor-1260	510	14	

Surrogate	%REC	Limits
TCMX	72	66-140
Decachlorobiphenyl	74	51-150

Field ID: QTP-08-18@2.0' Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-005 Analyzed: 02/11/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 11%

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

		^	
	Surrogate	%REC	Limits
TCMX		71	66-140
Decachlo	orobiphenyl	81	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-18@3.75' Field ID: Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-006 Analyzed: 02/11/08 dry 14% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	76	14	
Aroclor-1260	90	14	

Surrogate	%REC	Limits
TCMX	71	66-140
Decachlorobiphenyl	77	51-150

Field ID: QTP-08-18@5' 134648 Batch#: SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-007 Analyzed: 02/11/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 17%

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

	Surrogate	%REC	Limits
TCMX		65 *	66-140
Decachl	orobiphenyl	66	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-19@2.0' Field ID: Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-008 Analyzed: 02/12/08 dry 15% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	68	66-140
Decachlorobiphenyl	78	51-150

Field ID: QTP-08-19@3.5' 134648 Batch#: SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-010 Analyzed: 02/12/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 12%

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	27
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	ND	14
Aroclor-1260	ND	14

Surrogate	%REC	Limits
TCMX	75	66-140
Decachlorobiphenyl	75	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-20@2.5' Field ID: Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-011 Analyzed: 02/12/08 dry 17% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	73	66-140
Decachlorobiphenyl	79	51-150

Field ID: QTP-08-20@5.0' 134648 Batch#: SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-012 Analyzed: 02/12/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 8%

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-21@2.5' Field ID: Batch#: 134648 SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-013 Analyzed: 02/12/08 dry 17% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	72	66-140
Decachlorobiphenyl	81	51-150

Field ID: QTP-08-21@5' 134648 Batch#: SAMPLE 02/09/08 Type: Prepared: Lab ID: 201057-014 Analyzed: 02/12/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 16%

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	29
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	ND	14
Aroclor-1260	ND	14

	a	0.550	- ' '
	Surrogate	%REC	Limits
TCMX		75	66-140
Decachlo	orobiphenyl	86	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant 201057 Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/07/08 Units: ug/Kg Received: 02/07/08

QTP-08-22@2.0' Field ID: Batch#: 134776 SAMPLE 02/13/08 Type: Prepared: Lab ID: 201057-015 Analyzed: 02/13/08 Basis: Cleanup Method: EPA 3665A dry 18\$ Moisture:

ND

ND

Analyte Result RLAroclor-1016 ND 15 Aroclor-1221 29 ND Aroclor-1232 ND 15 Aroclor-1242 Aroclor-1248 ND 15 ND 15

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenvl	104	51-150

15

Field ID: QTP-08-22@4' Batch#: 134776
Type: SAMPLE Prepared: 02/13/08
Lab ID: 201057-016 Analyzed: 02/13/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 16%

Diln Fac:

Aroclor-1254

Aroclor-1260

1.000

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	116	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit
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1430 / 01 12



 Matrix:
 Soil
 Sampled:
 02/07/08

 Units:
 ug/Kg
 Received:
 02/07/08

 Diln Fac:
 1.000

Field ID: QTP-08-23@1.5' Batch#: 134776
Type: SAMPLE Prepared: 02/13/08
Lab ID: 201057-017 Analyzed: 02/13/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 6%

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	112	51-150

Field ID: QTP-08-23@3.5' Batch#: 134776
Type: SAMPLE Prepared: 02/13/08
Lab ID: 201057-018 Analyzed: 02/13/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 19%

Analyte	Result	RL
Aroclor-1016	ND	15
Aroclor-1221	ND	30
Aroclor-1232	ND	15
Aroclor-1242	ND	15
Aroclor-1248	ND	15
Aroclor-1254	150	15
Aroclor-1260	170	15

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	111	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-23@5.5' Field ID: Batch#: 134776 SAMPLE 02/13/08 Type: Prepared: Lab ID: 201057-019 Analyzed: 02/13/08 dry 18% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	29	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	110	15	
Aroclor-1260	130	15	

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	107	51-150

Field ID: QTP-08-24@20" Batch#: 134776 SAMPLE 02/13/08 Type: Prepared: Lab ID: 201057-020 Analyzed: 02/13/08 Basis: dry Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

		^	
	Surrogate	%REC	Limits
TCMX		106	66-140
Decachl	lorobiphenyl	110	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201057 Location: Former Larkspur Treatment Plant

Client: Questa Engineering Corporation Prep: EPA 3550B

Project#: STANDARD

Analysis: EPA 8082 Sampled: 0 Matrix: Soil 02/07/08 Received: Units: ug/Kg 02/07/08 Diln Fac: 1.000

QTP-08-24@48" Field ID:

SAMPLE Type: Lab ID: 201057-021

dry 12% Basis: Moisture:

Batch#: 134776 02/13/08 Prepared: Analyzed: 02/13/08 Cleanup Method: EPA 3665A

134776

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	$ar{1}ar{4}$	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	120	51-150

Field ID: QTP-08-25@2.0' Batch#: SAMPLE Type: Prepared:

02/13/08 Lab ID: 201057-022 Analyzed: 02/13/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 13%

3ma1	Result	DI
Analyte		RLi
Aroclor-1016	ND	14
Aroclor-1221	ND	28
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	64	14
Aroclor-1260	72	14

	Surrogate	%REC	Limits
TCMX		103	66-140
_ , ,	orobiphenvl	104	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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QTP-08-26@8" Field ID: Batch#: 134776 SAMPLE 02/13/08 Type: Prepared: Lab ID: Analyzed: 201057-023 02/13/08 dry 11% Basis: Cleanup Method: EPA 3665A Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	14	13	
Aroclor-1260	29	13	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	114	51-150

Type: BLANK Prepared: 02/09/08
Lab ID: QC427579 Analyzed: 02/11/08
Basis: as received Cleanup Method: EPA 3665A
Batch#: 134648

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	75	66-140
Decachlorobiphenyl	82	51-150

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Type: BLANK Prepared: 02/13/08
Lab ID: QC428079 Analyzed: 02/13/08
Basis: as received Cleanup Method: EPA 3665A

Batch#: 134776

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	122	66-140
Decachlorobiphenyl	128	51-150



	Polychlorinated	Biphenyls (PC	CBs)
Lab #:	201057	Location: Forme	r Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3	550B
Project#:	STANDARD	Analysis: EPA 8	082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC427580	Batch#:	134648
Matrix:	Soil	Prepared:	02/09/08
Units:	ug/Kg	Analyzed:	02/11/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	331.2	220.4	67	67-122

Surrogate	%REC	Limits
TCMX	78	66-140
Decachlorobiphenyl	81	51-150

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201057	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC428080	Batch#: 134776
Matrix:	Soil	Prepared: 02/13/08
Units:	ug/Kg	Analyzed: 02/13/08
Basis:	as received	

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	333.0	287.1	86	67-122

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	113	51-150

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	Polychlorinated	l Biphenyls (PCB	s)
Lab #: 201	1057	Location: Former	Larkspur Treatment Plant
Client: Que	esta Engineering Corporation	Prep: EPA 355	0B
Project#: ST	ANDARD	Analysis: EPA 808	2
Field ID:	QTP-08-03@3'	Batch#:	134776
MSS Lab ID:	201094-007	Sampled:	02/08/08
Matrix:	Soil	Received:	02/08/08
Units:	ug/Kg	Prepared:	02/13/08
Basis:	as received	Analyzed:	02/14/08
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3665A

Lab ID: QC428081

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<1.357	329.7	291.9	89	67-127

Surrogate	%REC	Limits
TCMX	112	66-140
Decachlorobiphenyl	113	51-150

Type: MSD Cleanup Method: EPA 3665A

Lab ID: QC428082

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	331.0	310.8	94	67-127	6	29

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	119	51-150



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201057	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/L	Received: 02/07/08
Diln Fac:	1.000	Prepared: 02/13/08
Batch#:	134816	Analyzed: 02/14/08
Sampled:	02/07/08	

Field ID: QTP-08-08@1.0' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201057-001

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

	Surrogate	%REC	Limits
TCMX		79	53-128
Decachlor	lorobiphenyl	64	26-120

Field ID: QTP-08-19@3.0' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201057-009

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	80	53-128
Decachlorobiphenyl	45	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201057	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/L	Received: 02/07/08
Diln Fac:	1.000	Prepared: 02/13/08
Batch#:	134816	Analyzed: 02/14/08
Sampled:	02/07/08	

Field ID: QTP-08-24@20" Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201057-020

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	88	53-128
Decachlorobiphenyl	78	26-120

Type: BLANK Matrix: Water
Lab ID: QC428257 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	88	53-128
Decachlorobiphenyl	56	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)	
Lab #:	201057	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: EPA 3520C	
Project#:	STANDARD	Analysis: EPA 8082	
Matrix:	Water	Batch#: 134816	
Units:	ug/L	Prepared: 02/13/08	
Diln Fac:	1.000	Analyzed: 02/14/08	

Type: BS Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.125	81	61-123

Surrogate	%REC	Limits
TCMX	85	53-128
Decachlorobiphenyl	80	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428259

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	8.662	87	61-123	6	23

Surrogate	%REC	Limits
TCMX	90	53-128
Decachlorobiphenyl	67	26-120

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Moisture Lab #: 201057 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: METHOD Project#: STANDARD Analysis: ASTM D2216/CLP Moisture, Percent 02/07/08 Sampled: Analyte: Matrix: Soil Received: 02/07/08 Units: Analyzed: 02/12/08 Diln Fac: 1.000

Field ID	Lab ID	Result	RL	Batch#	
QTP-08-08@20"	201057-002	13	1	134771	
QTP-08-08@42"	201057-003	21	1	134771	
QTP-08-08 INNER@12"	201057-004	12	1	134771	
QTP-08-18@2.0'	201057-005	11	1	134771	
QTP-08-18@3.75'	201057-006	14	1	134771	
QTP-08-18@5'	201057-007	17	1	134771	
QTP-08-19@2.0'	201057-008	15	1	134771	
QTP-08-19@3.5'	201057-010	12	1	134771	
QTP-08-20@2.5'	201057-011	17	1	134771	
QTP-08-20@5.0'	201057-012	8	1	134771	
QTP-08-21@2.5'	201057-013	17	1	134771	
QTP-08-21@5'	201057-014	16	1	134771	
QTP-08-22@2.0'	201057-015	18	1	134771	
QTP-08-22@4'	201057-016	16	1	134771	
QTP-08-23@1.5'	201057-017	6	1	134771	
QTP-08-23@3.5'	201057-018	19	1	134771	
QTP-08-23@5.5'	201057-019	18	1	134771	
QTP-08-24@20"	201057-020	9	1	134771	
QTP-08-24@48"	201057-021	12	1	134771	
QTP-08-25@2.0'	201057-022	13	1	134771	
QTP-08-26@8"	201057-023	11	1	134772	

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		Moisture	
Lab #:	201057	Location:	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep:	METHOD
Project#:	STANDARD	Analysis:	ASTM D2216/CLP
Analyte:	Moisture, Percent	Units:	ે
Type:	SDUP	Diln Fac:	1.000
Matrix:	Soil	Analyzed:	02/12/08

Field ID	MSS Lab ID	Lab ID	MSS Result	Result	RL	RPD	Lim	Batch#	Sampled	Received
QTP-08-25@2.0'	201057-022	QC428068	13.24	14.48	1.000	9	15	134771	02/07/08	02/07/08
ZZZZZZZZZZ	201151-011	QC428069	11.31	11.24	1.000	1	15	134772	02/12/08	02/12/08



Polychlorinated Biphenyls (PCBs)

Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201094

Prep: Client: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082

Received: Matrix: Soil 02/08/08 ug/Kg 02/13/08 Units: Prepared:

Sampled: 02/08/08

Field ID: QTP-08-01@3' Diln Fac: 1.000 Type: SAMPLE Batch#: 134776 Lab ID: Analyzed: 02/13/08 201094-001 Basis: dry Cleanup Method: EPA 3665A

18% Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	29	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	%REC Limi
TCMX	110	110 66-1
Decachlorobiphenyl	113	113 51_1

QTP-08-01@4' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 134776 Lab ID: 201094-002 Analyzed: 02/13/08 Cleanup Method: EPA 3665A Basis: dry

Moisture: 18%

Analyte	Result	RL
Aroclor-1016	ND	15
Aroclor-1221	ND	29
Aroclor-1232	ND	15
Aroclor-1242	ND	15
Aroclor-1248	ND	15
Aroclor-1254	ND	15
Aroclor-1260	ND	15

	Surrogate	%REC	Limits
TCMX		102	66-140
Decachlor	robiphenyl	109	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 1 of 12

4.3



4.3

Matrix: Soil Received: 02/08/08 Units: ug/Kg Prepared: 02/13/08

Sampled: 02/08/08

Field ID: QTP-08-02@6'' Diln Fac: 2.000
Type: SAMPLE Batch#: 134776
Lab ID: 201094-003 Analyzed: 02/14/08
Basis: dry Cleanup Method: EPA 3665A

Basis: dry Moisture: 12%

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	38	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	1,200	19	
Aroclor-1260	1,100	19	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	78	51-150

Field ID: QTP-08-02@3.0' Diln Fac: 1.000
Type: SAMPLE Batch#: 134776
Lab ID: 201094-004 Analyzed: 02/14/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 19%

Analyte	Result	RL
Aroclor-1016	ND	15
Aroclor-1221	ND	30
Aroclor-1232	ND	15
Aroclor-1242	ND	15
Aroclor-1248	ND	15
Aroclor-1254	ND	15
Aroclor-1260	ND	15

	Surrogate	%REC	Limits
TCMX	20110	105	66-140
	orobiphenvl	113	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Project#: STANDARD Analysis: EPA 8082
Matrix: Soil Received: 02

 Matrix:
 Soil
 Received:
 02/08/08

 Units:
 ug/Kg
 Prepared:
 02/13/08

Sampled: 02/08/08

Field ID: QTP-08-03@18'' Diln Fac: Type: SAMPLE Batch#:

Type: SAMPLE Batch#: 134776
Lab ID: 201094-005 Analyzed: 02/14/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 15%

Analyte Result RLAroclor-1016 ND 14 Aroclor-1221 28 ND Aroclor-1232 ND 14 Aroclor-1242 ND 14 Aroclor-1248 14 ND Aroclor-1254 ND 14 Aroclor-1260 ND 14

 Surrogate
 %REC
 Limits

 TCMX
 111
 66-140

 Decachlorobiphenyl
 108
 51-150

Field ID: QTP-08-03@3' Diln Fac: 1.000
Type: SAMPLE Batch#: 134776
Lab ID: 201094-007 Analyzed: 02/14/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 13%

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	28
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	ND	14
Aroclor-1260	ND	$1\overline{4}$

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	113	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08

QTP-08-12@2.5' Diln Fac: Field ID: 1.000 Batch#: SAMPLE 134776 Type: Lab ID: 201094-008 Analyzed: 02/14/08 dry 12% Basis: Cleanup Method: EPA 3665A Moisture:

02/08/08

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	290	14	
Aroclor-1260	360	14	

Field ID: QTP-08-12@5' Diln Fac: 1.000
Type: SAMPLE Batch#: 134776
Lab ID: 201094-009 Analyzed: 02/13/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 12%

Sampled:

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	27
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	ND	14
Aroclor-1260	ND	14

	Surrogate	%REC	Limits
TCMX		106	66-140
Decachlo	probiphenyl	127	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 4 of 12

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08

QTP-08-13@2.5' Diln Fac: Field ID: 1.000 SAMPLE Batch#: 134776 Type: Lab ID: Analyzed: 201094-010 02/13/08 Basis: Cleanup Method: EPA 3665A dry 13ء Moisture:

02/08/08

Analyte Result RLAroclor-1016 ND 14 Aroclor-1221 28 ND Aroclor-1232 ND 14 Aroclor-1242 Aroclor-1248 ND 14 ND 14 Aroclor-1254 240 14 Aroclor-1260 230 14

Field ID: QTP-08-13@4' Diln Fac: 1.000
Type: SAMPLE Batch#: 134776
Lab ID: 201094-011 Analyzed: 02/13/08
Basis: dry Cleanup Method: EPA 3665A

Moisture: 19%

Sampled:

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	260	15	
Aroclor-1260	760	15	

Ī			
	Surrogate	%REC	Limits
TCMX		96	66-140
Decachlorok	biphenyl	102	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201094 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08

Field ID: QTP-08-13@5' Diln Fac: 1.000 Batch#: SAMPLE 134776 Type: Lab ID: Analyzed: 02/13/08 201094-012 dry 16% Basis: Cleanup Method: EPA 3665A

Moisture:

02/08/08

Sampled:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	91	66-140
Decachlorobiphenyl	101	51-150

Field ID: QTP-08-14@3.5' Diln Fac: 5.000 SAMPLE Type: Batch#: 134790 Lab ID: 201094-013 Analyzed: 02/14/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 14%

Analyte	Result	RL	
Aroclor-1016	ND	49	
Aroclor-1221	ND	97	
Aroclor-1232	ND	49	
Aroclor-1242	ND	49	
Aroclor-1248	ND	49	
Aroclor-1254	2,700	49	
Aroclor-1260	3,100	49	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	75	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08 Sampled:

QTP-08-14@4.5' Diln Fac: Field ID: 1.000 SAMPLE Batch#: 134790 Type: Lab ID: Analyzed: 201094-014 02/13/08 Basis: Cleanup Method: EPA 3665A dry 11\$ Moisture:

02/08/08

Analyte Result RLAroclor-1016 ND 13 Aroclor-1221 27 ND Aroclor-1232 ND 13 Aroclor-1242 Aroclor-1248 ND 13 ND 13 Aroclor-1254 13 ND Aroclor-1260 ND 13

Surrogate	rrogate %REC	Limits
TCMX	106	66-140
Decachlorobiphenyl		51-150

QTP-08-14@5.5' Diln Fac: Field ID: 1.000 SAMPLE Type: Batch#: 134790 Lab ID: 201094-015 Analyzed: 02/13/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 19%

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	Limits
TCMX	88	66-140
Decachlorobiphenyl	96	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 7 of 12

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08

Field ID: QTP-08-15@3.5' Diln Fac: 2.000 Batch#: Type: SAMPLE 134790 Lab ID: 201094-016 Analyzed: 02/14/08 Basis: Cleanup Method: EPA 3665A dry 13% Moisture:

02/08/08

Analyte Result RLAroclor-1016 ND 19 Aroclor-1221 38 ND Aroclor-1232 ND 19 Aroclor-1242 ND 19 Aroclor-1248 19 ND Aroclor-1254 1,200 19 Aroclor-1260 1,100 19

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	86	51-150

Field ID: Diln Fac: QTP-08-15@4.5' 2.000 Type: SAMPLE Batch#: 134790 Lab ID: 201094-017 Analyzed: 02/13/08 Basis: dry Cleanup Method: EPA 3665A Moisture:

 Analyte
 Result
 RL

 Aroclor-1016
 ND
 18

 Aroclor-1221
 ND
 37

 Aroclor-1232
 ND
 18

 Aroclor-1242
 ND
 18

 Aroclor-1242
 ND
 18

Aroclor-1242 ND 18
Aroclor-1248 ND 18
Aroclor-1254 1,100 18
Aroclor-1260 1,100 18

 Surrogate
 %REC
 Limits

 TCMX
 126
 66-140

 Decachlorobiphenyl
 112
 51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Sampled:



Polychlorinated Biphenyls (PCBs) Lab #: 201094 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08 Sampled: 02/08/08

Field ID: QTP-08-15@5.5' Diln Fac: 1.000 Batch#: SAMPLE 134790 Type: Lab ID: Analyzed: 201094-018 02/13/08 dry 12% Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	99	51-150

Field ID: QTP-08-16@1.5' Diln Fac: 2.000 SAMPLE Type: Batch#: 134790 Lab ID: 201094-019 Analyzed: 02/14/08 Basis: dry Cleanup Method: EPA 3665A

Moisture: 11%

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	38	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	830	19	
Aroclor-1260	1,400	19	

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	77	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 9 of 12

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Lab #: Client: Questa Engineering Corporation EPA 3550B Prep: Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08 Sampled: 02/08/08

QTP-08-16@4' Diln Fac: Field ID: 1.000 SAMPLE Batch#: 134790 Type: Lab ID: Analyzed: 201094-020 02/13/08 dry 10% Basis: Cleanup Method: EPA 3665A Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	107	51-150

Field ID: QTP-08-17@12'' Diln Fac: 1.000 Type: SAMPLE Batch#: 134790 Lab ID: 201094-021 Analyzed: 02/13/08 Basis: dry Cleanup Method: EPA 3665A Moisture:

Analyte Result RL Aroclor-1016 13 ND Aroclor-1221 ND 26 Aroclor-1232 ND 13 Aroclor-1242 13 ND Aroclor-1248 ND 13 Aroclor-1254 Aroclor-1260 ND 13 ND 13

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	89	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201094 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: Received: Project#: STANDARD EPA 8082 Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08 Sampled: 02/08/08

Field ID: QTP-08-17@48'' Diln Fac: 50.00 Batch#: SAMPLE 134790 Type: Lab ID: 201094-022 Analyzed: 02/14/08 dry Basis: Cleanup Method: EPA 3665A

Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	470	
Aroclor-1221	ND	940	
Aroclor-1232	ND	470	
Aroclor-1242	ND	470	
Aroclor-1248	ND	470	
Aroclor-1254	16,000	470	
Aroclor-1260	31,000	470	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-150

134776 Type: BLANK Analyzed: Batch#: Lab ID: QC428079 02/13/08 as received 1.000 Cleanup Method: EPA 3665A Basis:

Diln Fac:

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	122	66-140
Decachlorobiphenyl	128	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201094 Client: Questa Engineering Corporation Analysis: EPA 8082 Received: 0 Project#: STANDARD Matrix: Soil 02/08/08 Units: ug/Kg Prepared: 02/13/08 Sampled: 02/08/08

Type: BLANK Batch#: 134790
Lab ID: QC428155 Analyzed: 02/13/08
Basis: as received Cleanup Method: EPA 3665A

Diln Fac: 1.000

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	107	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls	(PCBs)
Lab #:	201094	Location: F	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: E	EPA 3550B
Project#:	STANDARD	Analysis: E	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC428080	Batch#:	134776
Matrix:	Soil	Prepared:	02/13/08
Units:	ug/Kg	Analyzed:	02/13/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	333.0	287.1	86	67-122

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	113	51-150

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 20109	1	Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: STANDA	ARD	Analysis: EPA 8082
Field ID:	QTP-08-03@3'	Batch#: 134776
MSS Lab ID:	201094-007	Sampled: 02/08/08
Matrix:	Soil	Received: 02/08/08
Units:	ug/Kg	Prepared: 02/13/08
Basis:	dry	Analyzed: 02/14/08
Diln Fac:	1.000	

Type: MS Moisture: 13%

Lab ID: QC428081 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<1.559	379.0	335.5	89	67-127

Surrogate	%REC	Limits
TCMX	112	66-140
Decachlorobiphenyl	113	51-150

Type: MSD Moisture: 13%

Lab ID: QC428082 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	380.5	357.2	94	67-127	6	29

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	119	51-150



	Polychlorinated	Biphenyls	(PCBs)
Lab #:	201094	Location: Fo	ormer Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EF	PA 3550B
Project#:	STANDARD	Analysis: EF	PA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC428156	Batch#:	134790
Matrix:	Soil	Prepared:	02/13/08
Units:	ug/Kg	Analyzed:	02/13/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	327.9	287.5	88	67-122

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	105	51-150

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	Polychlorinat	ted Biphenyls (PCBs)
Lab #: 20	01094	Location: Former Larkspur Treatment Plant
Client: Qu	uesta Engineering Corporation	Prep: EPA 3550B
Project#: S7	randard	Analysis: EPA 8082
Field ID:	QB-08-04@6'	Batch#: 134790
MSS Lab ID:	201123-008	Sampled: 02/11/08
Matrix:	Soil	Received: 02/11/08
Units:	ug/Kg	Prepared: 02/13/08
Basis:	dry	Analyzed: 02/14/08
Diln Fac:	2.000	

Type: MS Moisture: 12%

Lab ID: QC428157 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<15.64	375.9	364.8	97	67-127

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	86	51-150

Type: MSD Moisture: 12%

Lab ID: QC428158 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	376.8	401.0	106	67-127	9	29

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	84	51-150



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201094	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Field ID:	QTP-08-03@2'	Sampled: 02/08/08
Units:	ug/L	Received: 02/08/08
Diln Fac:	1.000	Prepared: 02/13/08
Batch#:	134816	Analyzed: 02/14/08

Type: SAMPLE Matrix: WET Leachate Lab ID: 201094-006 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	86	53-128
Decachlorobiphenyl	42	26-120

Type: BLANK Matrix: Water Lab ID: QC428257 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	88	53-128
Decachlorobiphenyl	56	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201094	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Matrix:	Water	Batch#: 134816
Units:	ug/L	Prepared: 02/13/08
Diln Fac:	1.000	Analyzed: 02/14/08

Type: BS Cleanup Method: EPA 3665A

Lab ID: QC428258

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.125	81	61-123

Surrogate	%REC	Limits
TCMX	85	53-128
Decachlorobiphenyl	80	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428259

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	8.662	87	61-123	6	23

Surrogate	%REC	Limits
TCMX	90	53-128
Decachlorobiphenyl	67	26-120



Moisture Lab #: 201094 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: METHOD Project#: STANDARD Analysis: ASTM D2216/CLP Moisture, Percent Sampled: 02/08/08 Analyte: Matrix: Soil Received: 02/08/08 Units: Analyzed: 02/14/08 Diln Fac: 1.000

Field ID	Lab ID	Result	RL	Batch#	
QTP-08-01@3'	201094-001	18	1	134858	
QTP-08-01@4'	201094-002	18	1	134858	
QTP-08-02@6''	201094-003	12	1	134858	
QTP-08-02@3.0'	201094-004	19	1	134858	
QTP-08-03@18''	201094-005	15	1	134858	
QTP-08-03@3'	201094-007	13	1	134871	
QTP-08-12@2.5'	201094-008	12	1	134871	
QTP-08-12@5'	201094-009	12	1	134871	
QTP-08-13@2.5'	201094-010	13	1	134871	
QTP-08-13@4'	201094-011	19	1	134871	
QTP-08-13@5'	201094-012	16	1	134871	
QTP-08-14@3.5'	201094-013	14	1	134871	
QTP-08-14@4.5'	201094-014	11	1	134871	
QTP-08-14@5.5'	201094-015	19	1	134871	
QTP-08-15@3.5'	201094-016	13	1	134871	
QTP-08-15@4.5'	201094-017	8	1	134871	
QTP-08-15@5.5'	201094-018	12	1	134871	
QTP-08-16@1.5'	201094-019	11	1	134871	
QTP-08-16@4'	201094-020	10	1	134871	
QTP-08-17@12''	201094-021	6	1	134871	
QTP-08-17@48''	201094-022	10	1	134871	



	Мо	pisture	
Lab #:	201094	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: METHOD	
Project#:	STANDARD	Analysis: ASTM D2216/CLP	
Analyte:	Moisture, Percent	Diln Fac: 1.000	
Type:	SDUP	Received: 02/08/08	
Matrix:	Soil	Analyzed: 02/14/08	
Units:	ે		

Field ID	MSS Lab ID Lab I	D MSS Result	Result	RL	RPD	Lim	Batch#	Sampled
QTP-08-03@1.8'	201094-005 QC4284	33 15.22	16.05	1.000	5	15	134858	02/08/08
ZZZZZZZZZ	201062-001 QC4284	88 16.63	17.95	1.000	8	15	134871	02/07/08



Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-02@1.0' Diln Fac: 1.000 Type: SAMPLE Batch#: 134790 Lab ID: 201123-001 Prepared: 02/13/08 Basis: dry Analyzed: 02/13/08 Moisture: 10% Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	27
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	180	13
Aroclor-1260	200	13

Surroga	Surrogate %REC	Limits
TCMX	100	66-140
Decachlorobiphen	chlorobiphenyl 103	51-150

Field ID: QB-08-02@6' Diln Fac: 1.000 Batch#: Type: SAMPLE 134790 Lab ID: 201123-002 Prepared: 02/13/08 Basis: Analyzed: 02/13/08 dry Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	100	14	
Aroclor-1260	110	14	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	108	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-02@10' Diln Fac: 1.000 Type: SAMPLE Batch#: 134790 Lab ID: 201123-003 Prepared: 02/13/08 Basis: dry Analyzed: 02/13/08 Moisture: 9% Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	360	13
Aroclor-1260	410	13

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	102	51-150

Field ID: QB-08-02@11.5' Diln Fac: 1.000 SAMPLE Batch#: 134790 Type: Lab ID: 201123-004 Prepared: 02/13/08 Basis: Analyzed: 02/13/08 dry Moisture: 16% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	760	14	
Aroclor-1260	620	14	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	104	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-02@13' Diln Fac: 1.000 Type: SAMPLE Batch#: 134790 Lab ID: 201123-006 Prepared: 02/13/08 Basis: dry Analyzed: 02/14/08 Moisture: 9% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	88	51-150

Field ID: QB-08-04@3.5' Diln Fac: 1.000 Batch#: 134790 Type: SAMPLE Lab ID: 201123-007 Prepared: 02/13/08 Basis: Analyzed: 02/14/08 dry Moisture: 9% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	400	13	
Aroclor-1260	430	13	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	78	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-04@6' Diln Fac: 2.000 Type: SAMPLE Batch#: 134790 Lab ID: 201123-008 Prepared: 02/13/08 Basis: dry Analyzed: 02/14/08 Moisture: 12% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	38	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	740	19	
Aroclor-1260	910	19	

Surrogate	%REC	Limits
TCMX	91	66-140
Decachlorobiphenyl	87	51-150

Field ID: QB-08-04@9' Diln Fac: 1.000 Batch#: 134790 Type: SAMPLE Lab ID: 201123-009 Prepared: 02/13/08 Basis: Analyzed: 02/14/08 dry Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	69	51-150

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyl	s (PCBs)
Lab #:	201123	Location:	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep:	EPA 3550B
Project#:	STANDARD	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	02/11/08
Units:	ug/Kg	Received:	02/11/08

Field ID: QB-08-07@1.5' Diln Fac: 1.000 Type: SAMPLE Batch#: 134790 Lab ID: 201123-010 Prepared: 02/13/08 Basis: dry Analyzed: 02/14/08 Moisture: 10% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	58	13	
Aroclor-1260	72	13	

Surrogate	%REC	Limits
TCMX	90	66-140
Decachlorobiphenyl	71	51-150

Field ID: QB-08-07@3.5' Diln Fac: 1.000 SAMPLE Batch#: 134790 Type: Lab ID: 201123-011 Prepared: 02/13/08 Basis: Analyzed: 02/14/08 dry Moisture: 16% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	17	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	90	66-140
Decachlorobiphenyl	75	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-07@6.5' Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201123-012 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 Moisture: 17% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	81	66-140
Decachlorobiphenyl	86	51-150

Field ID: QB-08-07@10' Diln Fac: 1.000 Batch#: Type: SAMPLE 134869 Lab ID: 201123-014 Prepared: 02/14/08 Basis: Analyzed: 02/15/08 dry Moisture: 23% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	16	
Aroclor-1221	ND	31	
Aroclor-1232	ND	16	
Aroclor-1242	ND	16	
Aroclor-1248	ND	16	
Aroclor-1254	23	16	
Aroclor-1260	ND	16	

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	99	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

QB-08-07@11.5' Field ID: Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201123-015 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 Moisture: 8% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

	Surrogate	%REC	Limits
TCMX		106	66-140
Decachlo	orobiphenyl	110	51-150

Field ID: QB-08-04@12.5' Diln Fac: 1.000 Batch#: Type: SAMPLE 134869 Lab ID: 201123-016 Prepared: 02/14/08 Basis: Analyzed: 02/15/08 dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	106	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-04@14.5' Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201123-017 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 Moisture: 6% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	119	51-150

Field ID: QB-08-04@20' Diln Fac: 1.000 Batch#: Type: SAMPLE 134869 Lab ID: 201123-018 Prepared: 02/14/08 Basis: Analyzed: 02/15/08 dry Moisture: 5% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	25	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	94	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-06@13' Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201123-019 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 Moisture: 12% Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	14
Aroclor-1221	ND	27
Aroclor-1232	ND	14
Aroclor-1242	ND	14
Aroclor-1248	ND	14
Aroclor-1254	68	14
Aroclor-1260	140	14

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	109	51-150

Field ID: QB-08-06@10' Diln Fac: 1.000 Batch#: Type: SAMPLE 134869 Lab ID: 201123-020 Prepared: 02/14/08 Basis: Analyzed: 02/15/08 dry Moisture: 6% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	330	13	
Aroclor-1260	490	13	

Surrogate	%REC	Limits
TCMX	127	66-140
Decachlorobiphenyl	123	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Field ID: QB-08-06@7' Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201123-022 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 Moisture: 14% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	220	14	
Aroclor-1260	240	14	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	94	51-150

Field ID: QB-08-06@14' Diln Fac: 1.000 Batch#: Type: SAMPLE 134869 Lab ID: 201123-023 Prepared: 02/14/08 Basis: Analyzed: 02/15/08 dry Moisture: 10% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	16	13	
Aroclor-1260	19	13	

Surrogate	%REC	Limits
TCMX	118	66-140
Decachlorobiphenyl	120	51-150

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201123 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3550B Prep: Project#: STANDARD Analysis: EPA 8082 Matrix: Soil Sampled: 02/11/08 Units: ug/Kg Received: 02/11/08

Type: BLANK Batch#: 134790
Lab ID: QC428155 Prepared: 02/13/08
Basis: as received Analyzed: 02/13/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	107	51-150

Type: BLANK Batch#: 134869
Lab ID: QC428480 Prepared: 02/14/08
Basis: as received Analyzed: 02/15/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	115	51-150

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCE	3s)
Lab #:	201123	Location: Former	Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 355	50B
Project#:	STANDARD	Analysis: EPA 808	82
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC428156	Batch#:	134790
Matrix:	Soil	Prepared:	02/13/08
Units:	ug/Kg	Analyzed:	02/13/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	327.9	287.5	88	67-122

Surrogate	%REC	Limits
TCMX	101	66-140
Decachlorobiphenyl	105	51-150

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	Polychlorinated	d Biphenyls (PCBs)
Lab #: 2	01123	Location: Former Larkspur Treatment Plant
Client: Q	uesta Engineering Corporation	Prep: EPA 3550B
Project#: S	TANDARD	Analysis: EPA 8082
Field ID:	QB-08-04@6'	Batch#: 134790
MSS Lab ID:	201123-008	Sampled: 02/11/08
Matrix:	Soil	Received: 02/11/08
Units:	ug/Kg	Prepared: 02/13/08
Basis:	dry	Analyzed: 02/14/08
Diln Fac:	2.000	

Type: MS Moisture: 12%

Lab ID: QC428157 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<15.64	375.9	364.8	97	67-127

Surrogate	%REC	Limits
TCMX	96	66-140
Decachlorobiphenyl	86	51-150

Type: MSD Moisture: 12%

Lab ID: QC428158 Cleanup Method: EPA 3665A

Analyte	Analyte Spiked		%REC	Limits	RPD	Lim
Aroclor-1221	376.8	401.0	106	67-127	9	29

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	84	51-150



	Polychlorinated	Biphenyls (PC	Bs)
Lab #:	201123	Location: Former	Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 35	550B
Project#:	STANDARD	Analysis: EPA 80	082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC428481	Batch#:	134869
Matrix:	Soil	Prepared:	02/14/08
Units:	ug/Kg	Analyzed:	02/15/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	332.6	293.7	88	67-122

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	111	51-150

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	Polychlorinate	d Biphenyls (PCBs)
Lab #: 201	123	Location: Former Larkspur Treatment Plant
Client: Ques	sta Engineering Corporation	Prep: EPA 3550B
Project#: STA	NDARD	Analysis: EPA 8082
Field ID:	QTP-08-04@1.5'	Batch#: 134869
MSS Lab ID:	201124-001	Sampled: 02/11/08
Matrix:	Soil	Received: 02/11/08
Units:	ug/Kg	Prepared: 02/14/08
Basis:	dry	Analyzed: 02/15/08
Diln Fac:	1.000	

Type: MS Moisture: 18%

Lab ID: QC428482 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<1.673	406.4	349.5	86	67-127

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	95	51-150

Type: MSD Moisture: 18%

Lab ID: QC428483 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	401.4	365.4	91	67-127	6	29

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	99	51-150



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201123	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/L	Received: 02/11/08
Diln Fac:	1.000	Prepared: 02/14/08
Batch#:	134875	Analyzed: 02/19/08
Sampled:	02/11/08	

Field ID: QB-08-02@12' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201123-005

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surro	gate %RE	C Limit
ГСМХ	93	53-12
1 (1121	75	33 12
Decachlorobiphe	nyl 55	26-12

Field ID: QB-08-07@7.5' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201123-013

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	88	53-128
Decachlorobiphenyl	59	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201123	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Units:	ug/L	Received: 02/11/08
Diln Fac:	1.000	Prepared: 02/14/08
Batch#:	134875	Analyzed: 02/19/08
Sampled:	02/11/08	

Field ID: QB-08-06@6.5' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A

Lab ID: 201123-021

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	89	53-128
Decachlorobiphenyl	85	26-120

Type: BLANK Matrix: Water
Lab ID: QC428497 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	102	53-128
Decachlorobiphenyl	97	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201123	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Matrix:	Water	Batch#: 134875
Units:	ug/L	Prepared: 02/14/08
Diln Fac:	1.000	Analyzed: 02/19/08

Type: BS Cleanup Method: EPA 3665A

Lab ID: QC428498

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.252	83	61-123

Surrogate	%REC	Limits
TCMX	103	53-128
Decachlorobiphenyl	101	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428499

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	9.005	90	61-123	9	23

Surrogate	%REC	Limits
TCMX	100	53-128
Decachlorobiphenyl	56	26-120

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CASE NARRATIVE

Laboratory number: 201124

Client: Questa Engineering Corporation
Location: Former Larkspurt Treatment Plant

Request Date: 02/11/08 Samples Received: 02/11/08

This hardcopy data package contains sample and QC results for twenty one soil samples, requested for the above referenced project on 02/11/08. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082) WET Leachate:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspurt Treatment Plant Prep: EPA 3550B Lab #: 201124 Prep: Client: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 02/11/08 02/11/08 Sampled: Matrix: Soil ug/Kg Units: Received:

QTP-08-04@1.5' Field ID: Diln Fac: 1.000 Type: SAMPLE Batch#: 134869 Lab ID: 201124-001 Prepared: 02/14/08 02/15/08 Basis: Analyzed: dry Moisture: 18% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	29	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	111	51-150

Field ID: QTP-08-04@3.0' Diln Fac: 1.000 SAMPLE Batch#: Type: 134869 Lab ID: 201124-002 Prepared: 02/14/08 Basis: dry Analyzed: 02/15/08 10ទំ Cleanup Method: EPA 3665A Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	15	13	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	109	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: Units: ug/Kg 02/11/08

QTP-08-04@4.5' Field ID: Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lāb ID: 201124-003 02/14/08 Prepared: Basis: dry Analyzed: 02/15/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	39	14	
Aroclor-1260	53	14	

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	98	51-150

Field ID: QTP-08-05@1.5' Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lab ID: 201124-004 02/14/08 Prepared: Basis: dry Analyzed: 02/15/08 Moisture: $14\frac{1}{8}$ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	230	14	
Aroclor-1260	170	14	

Surrogate	%REC	Limits
TCMX	122	66-140
Decachlorobiphenyl	115	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-05@2.5' Field ID: Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lāb ID: 201124-005 02/14/08 Prepared: Basis: dry Analyzed: 02/15/08 Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	109	51-150

Field ID: QTP-08-06@0.5' Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lab ID: 201124-006 02/14/08 Prepared: Basis: dry Analyzed: 02/20/08 Moisture: 7% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	100	13	
Aroclor-1260	180	13	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	98	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant Client: EPA 3550B Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-06@1.5' Field ID: Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lāb ID: 201124-007 02/14/08 Prepared: Basis: dry Analyzed: 02/15/08 Moisture: 14% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	23	14	

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	113	51-150

Field ID: QTP-08-07@0.5' Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lab ID: 201124-008 02/14/08 Prepared: Basis: Analyzed: 02/20/08 dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	19	13	
Aroclor-1260	25	13	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	106	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 4 of 10

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: Units: ug/Kg 02/11/08

QTP-08-07@1.5' Field ID: Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lāb ID: 201124-009 02/14/08 Prepared: Basis: dry Analyzed: 02/20/08 Moisture: 20% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	38	15	
Aroclor-1260	75	15	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	108	51-150

Field ID: QTP-08-09@1.5' Diln Fac: 1.000 134869 Type: SAMPLE Batch#: Lab ID: 201124-010 02/14/08 Prepared: Basis: Analyzed: 02/15/08 dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	108	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-09@2.5' Field ID: Diln Fac: 10.00 Type: SAMPLE Batch#: 134903 Lāb ID: 201124-011 02/15/08 Prepared: Basis: dry Analyzed: 02/20/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	88	
Aroclor-1221	ND	180	
Aroclor-1232	ND	88	
Aroclor-1242	ND	88	
Aroclor-1248	ND	88	
Aroclor-1254	2,800	88	
Aroclor-1260	3,900	88	

Surrogate	%REC	Limits	
TCMX	DO	66-140	
Decachlorobiphenyl	DO	51-150	

Field ID: QTP-08-09@4' Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lab ID: 201124-012 02/15/08 Prepared: Basis: Analyzed: 02/15/08 dry Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	108	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant Client: EPA 3550B Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-10@2.5' Field ID: Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lāb ID: 201124-013 02/15/08 Prepared: Basis: dry Analyzed: 02/20/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	25	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	12	12	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	106	51-150

Field ID: QTP-08-10@4.0' Diln Fac: 10.00 Type: SAMPLE Batch#: 134903 Lab ID: 201124-014 02/15/08 Prepared: Basis: dry Analyzed: 02/20/08 Moisture: 7% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	89	
Aroclor-1221	ND	180	
Aroclor-1232	ND	89	
Aroclor-1242	ND	89	
Aroclor-1248	ND	89	
Aroclor-1254	3,000	89	
Aroclor-1260	4,700	89	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 7 of 10

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-10@5.0' Field ID: Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lāb ID: 201124-015 02/15/08 Prepared: Basis: dry Analyzed: 02/15/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	108	51-150

Field ID: QTP-08-11@28'' Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lab ID: 201124-016 02/15/08 Prepared: dry Basis: Analyzed: 02/15/08 Moisture: 6% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	420	13	
Aroclor-1260	490	13	

Surrogate	%REC	Limits
TCMX	82	66-140
Decachlorobiphenyl	93	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit Page 8 of 10

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Polychlorinated Biphenyls (PCBs) Lab #: 201124 Location: Former Larkspurt Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

QTP-08-11@3.0' Field ID: Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lāb ID: 201124-017 02/15/08 Prepared: Basis: dry Analyzed: 02/16/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	25	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	220	12	
Aroclor-1260	460	12	

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	109	51-150

Field ID: QTP-08-11@4' Diln Fac: 1.000 134903 Type: SAMPLE Batch#: Lab ID: 201124-018 02/15/08 Prepared: Basis: Analyzed: 02/16/08 dry Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	80	66-140
Decachlorobiphenyl	99	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: Location: Former Larkspurt Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/11/08 Received: 02/11/08 Units: ug/Kg

Type: BLANK Batch#: 134869
Lab ID: QC428480 Prepared: 02/14/08
Basis: as received Analyzed: 02/15/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	115	51-150

Type: BLANK Batch#: 134903
Lab ID: QC428603 Prepared: 02/15/08
Basis: as received Analyzed: 02/15/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	128	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201124	Location: Former Larkspurt Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3550B
Project#:	STANDARD	Analysis: EPA 8082
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC428481	Batch#: 134869
Matrix:	Soil	Prepared: 02/14/08
Units:	ug/Kg	Analyzed: 02/15/08
Basis:	as received	

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	332.6	293.7	88	67-122

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	111	51-150

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	Polychlorinated	d Biphenyls (PCBs)
Lab #: 2011	124	Location: Former Larkspurt Treatment Plant
Client: Ques	sta Engineering Corporation	Prep: EPA 3550B
Project#: STAM	NDARD	Analysis: EPA 8082
Field ID:	QTP-08-04@1.5'	Batch#: 134869
MSS Lab ID:	201124-001	Sampled: 02/11/08
Matrix:	Soil	Received: 02/11/08
Units:	ug/Kg	Prepared: 02/14/08
Basis:	dry	Analyzed: 02/15/08
Diln Fac:	1.000	

Type: MS Moisture: 18%

Lab ID: QC428482 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<1.673	406.4	349.5	86	67-127

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	95	51-150

Type: MSD Moisture: 18%

Lab ID: QC428483 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	401.4	365.4	91	67-127	6	29

Surrogate	%REC	Limits
TCMX	106	66-140
Decachlorobiphenyl	99	51-150



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201124	Location: For	mer Larkspurt Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA	. 3550B
Project#:	STANDARD	Analysis: EPA	. 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC428604	Batch#:	134903
Matrix:	Soil	Prepared:	02/15/08
Units:	ug/Kg	Analyzed:	02/15/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	332.6	292.0	88	67-122

Surrogate	%REC	Limits
TCMX	102	66-140
Decachlorobiphenyl	107	51-150

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Polychlorinated Biphenyls (PCBs)							
Lab #: 201124	•	Location: Former Larkspurt Treatment Plant					
Client: Questa	Engineering Corporation	Prep: EPA 3550B					
Project#: STANDA	ARD	Analysis: EPA 8082					
Field ID:	ZZZZZZZZZZ	Batch#: 134903					
MSS Lab ID:	201119-002	Sampled: 02/11/08					
Matrix:	Soil	Received: 02/11/08					
Units:	ug/Kg	Prepared: 02/15/08					
Basis:	dry	Analyzed: 02/15/08					
Diln Fac:	1.000						

Type: MS Moisture: 2%

Lab ID: QC428605 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<6.616	338.7	298.1	88	67-127

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	106	51-150

Type: MSD Moisture: 2%

Lab ID: QC428606 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	339.6	292.3	86	67-127	2	29

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	109	51-150



Polychlorinated Biphenyls (PCBs) Location: Former Larkspurt Treatment Plant Prep: EPA 3520C Lab #: 201124 Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Project#: STANDARD 02/11/08 02/14/08 Received: Units: ug/L 1.000 Diln Fac: Prepared: Batch#: 134875 Analyzed: 02/19/08 Sampled: 02/11/08

Field ID: QTP-08-10@2.5' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 201124-013

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	92	53-128
Decachlorobiphenyl	73	26-120

Field ID: QTP-08-12@28'' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 201124-019

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	104	53-128
Decachlorobiphenyl	80	26-120

Field ID: QTP-08-17@4' Matrix: WET Leachate Type: SAMPLE Cleanup Method: EPA 3665A Lab ID: 201124-020

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	98	53-128
Decachlorobiphenyl	79	26-120

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspurt Treatment Plant Prep: EPA 3520C
Analysis: EPA 8082
Received: 02/11/08 Lab #: 201124 Client: Questa Engineering Corporation Project#: STANDARD Units: ug/L Diln Fac: 1.000 Prepared: 02/14/08 Batch#: 134875 Analyzed: 02/19/08 02/11/08 Sampled:

Field ID: QTP-08-21@2.5' WET Leachate Matrix: SAMPLE Type: Cleanup Method: EPA 3665A 201124-021 Lab ID:

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits	
TCMX	86	53-128	
Decachlorobiphenyl	80	26-120	

Type: BLANK Matrix: Water Lab ID: QC428497 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	102	53-128
Decachlorobiphenyl	97	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)
Lab #:	201124	Location: Former Larkspurt Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Matrix:	Water	Batch#: 134875
Units:	ug/L	Prepared: 02/14/08
Diln Fac:	1.000	Analyzed: 02/19/08

Type: BS Cleanup Method: EPA 3665A

Lab ID: QC428498

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.252	83	61-123

Surrogate	%REC	Limits
TCMX	103	53-128
Decachlorobiphenyl	101	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428499

Analyt	ce Spiked	Result	%REC	Limits	RPD Li	Lm
Aroclor-1221	10.00	9.005	90	61-123	9 23	3

Surrogate	%REC	Limits
TCMX	100	53-128
Decachlorobiphenyl	56	26-120

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Moisture Lab #: 201124 Location: Former Larkspurt Treatment Plant Client: Questa Engineering Corporation Prep: METHOD Project#: STANDARD Analysis: ASTM D2216/CLP Moisture, Percent Batch#: 134878 Analyte: Matrix: Soil Sampled: 02/11/08 Units: Received: 02/11/08 1.000 Analyzed: 02/15/08 Diln Fac:

Field ID	Lab ID	Result	RL	
QTP-08-04@1.5'	201124-001	18	1	
QTP-08-04@3.0'	201124-002	10	1	
QTP-08-04@4.5'	201124-003	13	1	
QTP-08-05@1.5'	201124-004	14	1	
QTP-08-05@2.5'	201124-005	11	1	
QTP-08-06@0.5'	201124-006	7	1	
QTP-08-06@1.5'	201124-007	14	1	
QTP-08-07@0.5'	201124-008	11	1	
QTP-08-07@1.5'	201124-009	20	1	
QTP-08-09@1.5'	201124-010	11	1	
QTP-08-09@2.5'	201124-011	5	1	
QTP-08-09@4'	201124-012	15	1	
QTP-08-10@2.5'	201124-013	3	1	
QTP-08-10@4.0'	201124-014	7	1	
QTP-08-10@5.0'	201124-015	13	1	
QTP-08-11@28''	201124-016	6	1	
QTP-08-11@3.0'	201124-017	3	1	
QTP-08-11@4'	201124-018	15	1	



	Moisture					
Lab #:	201124	Location: Former Larkspurt Treatment Plant				
Client:	Questa Engineering Corporation	Prep: METHOD				
Project#:	STANDARD	Analysis: ASTM D2216/CLP				
Analyte:	Moisture, Percent	Units: %				
Field ID:	QTP-08-11@4'	Diln Fac: 1.000				
Type:	SDUP	Batch#: 134878				
MSS Lab ID	: 201124-018	Sampled: 02/11/08				
Lab ID:	QC428503	Received: 02/11/08				
Matrix:	Soil	Analyzed: 02/15/08				

MSS Result	Result	RL	RPD	Lim
15.38	16.22	1.000	5	15



CASE NARRATIVE

Laboratory number: 201125

Client: Questa Engineering Corporation
Location: Former Larkspur Treatment Plant

Request Date: 02/11/08 Samples Received: 02/11/08

This hardcopy data package contains sample and QC results for three water samples, requested for the above referenced project on 02/11/08. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Low recovery was observed for Aroclor-1221 in the LCS for batch 134940. This indicates that the filtering samples can remove target analytes. These samples were filtered per the clients request. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No other analytical problems were encountered.



Dissolved Polychlorinated Biphenyls (PCBs) Lab #: 201125 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3520C Prep: Project#: STANDARD Analysis: EPA 8082 Units: ug/L Sampled: 02/11/08 Diln Fac: 1.000 Received: 02/11/08 Batch#: 134940 02/16/08 Prepared:

Field ID: QB-08-06 GW Matrix: Filtrate
Type: SAMPLE Analyzed: 02/20/08
Lab ID: 201125-001 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	112	53-128
Decachlorobiphenyl	53	26-120

Field ID: QB-08-07 GW Matrix: Filtrate
Type: SAMPLE Analyzed: 02/20/08
Lab ID: 201125-002 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	111	53-128
Decachlorobiphenyl	73	26-120

ND= Not Detected RL= Reporting Limit

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Dissolved Polychlorinated Biphenyls (PCBs) Lab #: 201125 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3520C Prep: Project#: STANDARD Analysis: EPA 8082 Sampled: Units: ug/L 02/11/08 Diln Fac: 1.000 Received: 02/11/08 Batch#: 134940 02/16/08 Prepared:

Field ID: QB-08-02 GW Matrix: Filtrate
Type: SAMPLE Analyzed: 02/20/08
Lab ID: 201125-003 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	111	53-128
Decachlorobiphenyl	70	26-120

Type: BLANK Analyzed: 02/19/08
Lab ID: QC428746 Cleanup Method: EPA 3665A

Matrix: Water

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	94	53-128
Decachlorobiphenyl	60	26-120

ND= Not Detected RL= Reporting Limit

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Dissolved Polychlorinated Biphenyls (PCBs)						
Lab #:	201125	Location: Former Larkspur Treatment Plant				
Client:	Questa Engineering Corporation	Prep: EPA 3520C				
Project#:	STANDARD	Analysis: EPA 8082				
Matrix:	Water	Batch#: 134940				
Units:	ug/L	Prepared: 02/16/08				
Diln Fac:	1.000	Analyzed: 02/20/08				

Type: BS Cleanup Method: EPA 3665A

Type: BS Lab ID: QC428747

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.266	83	61-123

Surrogate	%REC	Limits
TCMX	110	53-128
Decachlorobiphenyl	40	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428748

Anal	lyte Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	7.866	79	61-123	5	23

Surrogate	%REC	Limits
TCMX	99	53-128
Decachlorobiphenyl	75	26-120



Dissolved Polychlorinated Biphenyls (PCBs)						
Lab #:	201125	Location: Former Larkspur Treatment Plant				
Client:	Questa Engineering Corporation	Prep: EPA 3520C				
Project#:	STANDARD	Analysis: EPA 8082				
Type:	LCS	Diln Fac: 1.000				
Lab ID:	QC428750	Batch#: 134940				
Matrix:	Filtrate	Prepared: 02/16/08				
Units:	ug/L	Analyzed: 02/20/08				

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.53	3.174	30 *	61-123

Surrogate	%REC	Limits
TCMX	97	53-128
Decachlorobiphenyl	50	26-120

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CASE NARRATIVE

Laboratory number: 201171

Client: Questa Engineering Corporation
Location: Former Larkspur Treatment Plant

Request Date: 02/13/08 Samples Received: 02/13/08

This hardcopy data package contains sample and QC results for forty seven soil samples, requested for the above referenced project on 02/13/08. The samples were received intact at ambient temperature.

Polychlorinated Biphenyls (PCBs) (EPA 8082) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. High surrogate recovery was observed for TCMX in QB-08-05@2' (lab # 201171-034); the corresponding decachlorobiphenyl surrogate recovery was within limits, and no target analytes were detected in the sample. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082) WET Leachate:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201171 Prep: Client: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 02/12/08 02/13/08 Sampled: Matrix: Soil ug/Kg Units: Received:

QB-08-14@2' Diln Fac: Field ID: 1.000 Type: SAMPLE Batch#: 135105 Lab ID: 201171-001 Prepared: 02/21/08 02/22/08 Basis: Analyzed: dry Moisture: 12% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	540	14	
Aroclor-1260	730	14	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	100	51-150

Field ID: QB-08-14@5' Diln Fac: 1.000 Batch#: Type: SAMPLE 135105 Lab ID: 201171-002 Prepared: 02/21/08 Basis: dry Analyzed: 02/22/08 12% Cleanup Method: EPA 3665A Moisture:

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	200	14	
Aroclor-1260	240	14	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	96	51-150

^{*=} Value outside of QC limits; see narrative

ND= Not Detected



Polychlorinated Biphenyls (PCBs) Lab #: Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/12/08 Units: ug/Kg Received: 02/13/08

QB-08-14@8' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135105 Lāb ID: 201171-003 02/21/08 Prepared: Analyzed: Basis: dry 02/22/08 Moisture: 14% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	430	14	
Aroclor-1260	460	14	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	100	51-150

Field ID: QB-08-14@11' Diln Fac: 1.000 Type: SAMPLE Batch#: 135105 Lab ID: 201171-004 02/21/08 Prepared: Basis: Analyzed: 02/22/08 dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	240	13	
Aroclor-1260	290	13	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	92	51-150



Polychlorinated Biphenyls (PCBs) Lab #: Location: Former Larkspur Treatment Plant EPA 3550B Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Soil 02/12/08 Received: Units: ug/Kg 02/13/08

1.000 QB-08-14@13' Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-005 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 20% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	113	51-150

Field ID: QB-08-11@10' Diln Fac: 1.000 Type: 135105 SAMPLE Batch#: Lab ID: 201171-006 02/21/08 Prepared: Basis: Analyzed: 02/22/08 dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	109	51-150

ND= Not Detected

RL= Reporting Limit

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QB-08-12@1' Field ID: Diln Fac: 5.000 Type: SAMPLE Batch#: 135105 Lāb ID: 201171-007 Prepared: 02/21/08 Analyzed: Basis: dry 02/26/08 Moisture: 14% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	48	
Aroclor-1221	ND	97	
Aroclor-1232	ND	48	
Aroclor-1242	ND	48	
Aroclor-1248	ND	48	
Aroclor-1254	1,800	48	
Aroclor-1260	2,500	48	

Surrogate	%REC	Limits
TCMX	112	66-140
Decachlorobiphenyl	128	51-150

Field ID: QB-08-12@3.5' Diln Fac: 1.000 Type: Batch#: 135105 SAMPLE Lab ID: 201171-008 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 13₹ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	170	14	
Aroclor-1260	400	14	

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	102	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-12@6' 1.000 Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-009 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 21% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	460	15	
Aroclor-1260	810	15	

Surrogate	%REC	Limits
TCMX	113	66-140
Decachlorobiphenyl	110	51-150

Field ID: QB-08-12@6.5' Diln Fac: 1.000 Type: 135105 Batch#: SAMPLE Lab ID: 02/21/08 201171-010 Prepared: Basis: Analyzed: 02/22/08 dry Moisture: 19% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	250	15	
Aroclor-1260	360	15	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	127	51-150



QB-08-12@11' 1.000 Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-011 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 22% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	31	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	200	15	
Aroclor-1260	310	15	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	111	51-150

Field ID: QB-08-12@13' Diln Fac: 1.000 Type: 135105 Batch#: SAMPLE Lab ID: 02/21/08 201171-012 Prepared: Basis: Analyzed: 02/22/08 dry Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	109	51-150



QB-08-13@2' 1.000 Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-013 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 12% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	108	51-150

Field ID: QB-08-13@3' Diln Fac: 1.000 Type: 135105 Batch#: SAMPLE Lab ID: 02/21/08 201171-014 Prepared: dry Basis: Analyzed: 02/22/08 Moisture: 6% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	112	51-150



QB-08-08@3' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135105 Lāb ID: 201171-015 02/21/08 Prepared: Analyzed: Basis: dry 02/22/08 Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	330	14	
Aroclor-1260	520	14	

Surrogate	%REC	Limits
TCMX	116	66-140
Decachlorobiphenyl	109	51-150

Field ID: QB-08-08@5.5' Diln Fac: 1.000 Type: Batch#: 135105 SAMPLE Lab ID: 02/21/08 201171-016 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 13₹ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	14	14	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	113	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-08@8' 1.000 Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-017 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 12% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	105	66-140
Decachlorobiphenyl	103	51-150

Field ID: QB-08-08@12' Diln Fac: 1.000 Type: 135105 SAMPLE Batch#: Lab ID: 02/21/08 201171-018 Prepared: Basis: Analyzed: 02/22/08 dry Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	108	51-150



QB-08-08@14' 1.000 Field ID: Diln Fac: 135105 Type: SAMPLE Batch#: Lāb ID: 201171-019 02/21/08 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	260	14	
Aroclor-1260	420	14	

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	115	51-150

Field ID: QB-08-08@14.5' Diln Fac: 1.000 Type: 135105 SAMPLE Batch#: Lab ID: 02/21/08 201171-020 Prepared: Basis: dry Analyzed: 02/22/08 Moisture: 16৾৽ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	120	51-150

ND= Not Detected

RL= Reporting Limit

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1.000 QB-08-09@3.5' Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-021 02/22/08 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: 14% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	390	14	
Aroclor-1260	580	14	

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	102	51-150

Field ID: QB-08-09@7.5' Diln Fac: 1.000 135115 Type: SAMPLE Batch#: Lab ID: 02/22/08 201171-022 Prepared: 02/25/08 Basis: Analyzed: dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	67	13	
Aroclor-1260	110	13	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	115	51-150

ND= Not Detected

RL= Reporting Limit

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QB-08-09@8' Field ID: Diln Fac: 5.000 Type: SAMPLE Batch#: 135115 Lāb ID: 201171-023 02/22/08 Prepared: Basis: dry Analyzed: 02/25/08 Moisture: 16% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	50	
Aroclor-1221	ND	99	
Aroclor-1232	ND	50	
Aroclor-1242	ND	50	
Aroclor-1248	ND	50	
Aroclor-1254	1,100	50	
Aroclor-1260	1,800	50	

Surrogate	%REC	Limits
TCMX	115	66-140
Decachlorobiphenyl	128	51-150

Field ID: QB-08-10@4.5' Diln Fac: 2.000 Type: 135115 Batch#: SAMPLE Lab ID: 02/22/08 201171-024 Prepared: 02/25/08 Basis: Analyzed: dry Moisture: 10₺ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	18	
Aroclor-1221	ND	37	
Aroclor-1232	ND	18	
Aroclor-1242	ND	18	
Aroclor-1248	ND	18	
Aroclor-1254	550	18	
Aroclor-1260	920	18	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	109	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-10@7.5' Field ID: Diln Fac: 2.000 Type: SAMPLE Batch#: 135115 Lāb ID: 201171-025 02/22/08 Prepared: Analyzed: Basis: dry 02/25/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	38	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	440	19	
Aroclor-1260	780	19	

Surrogate	%REC	Limits
TCMX	120	66-140
Decachlorobiphenyl	131	51-150

QB-08-10@9' Field ID: Diln Fac: 1.000 Type: Batch#: 135115 SAMPLE Lab ID: 201171-026 Prepared: 02/22/08 02/25/08 Basis: Analyzed: dry Moisture: 12^{\$} Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	27	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	250	14	
Aroclor-1260	520	14	

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	115	51-150

ND= Not Detected

RL= Reporting Limit

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1.000 QB-08-10@11.5' Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-027 02/22/08 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: 22% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	31	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	220	15	
Aroclor-1260	160	15	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	90	51-150

Field ID: QB-08-10@13' Diln Fac: 1.000 Type: 135115 SAMPLE Batch#: Lab ID: 201171-028 Prepared: 02/22/08 Basis: dry Analyzed: 02/23/08 Moisture: 16৾৽ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	127	66-140
Decachlorobiphenyl	139	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-11@2' Field ID: Diln Fac: 2.000 Type: SAMPLE Batch#: 135115 Lāb ID: 201171-029 02/22/08 Prepared: Analyzed: Basis: dry 02/25/08 Moisture: 10% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	19	
Aroclor-1221	ND	37	
Aroclor-1232	ND	19	
Aroclor-1242	ND	19	
Aroclor-1248	ND	19	
Aroclor-1254	620	19	
Aroclor-1260	860	19	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	104	51-150

QB-08-11@4' Field ID: Diln Fac: 1.000 Type: Batch#: 135115 SAMPLE Lab ID: 02/22/08 201171-030 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: 16৾৽ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	128	66-140
Decachlorobiphenyl	118	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-11@5.5' Field ID: Diln Fac: 5.000 Type: SAMPLE Batch#: 135115 Lāb ID: 201171-031 02/22/08 Prepared: Basis: dry Analyzed: 02/25/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	48	
Aroclor-1221	ND	96	
Aroclor-1232	ND	48	
Aroclor-1242	ND	48	
Aroclor-1248	ND	48	
Aroclor-1254	1,500	48	
Aroclor-1260	2,600	48	

Surrogate	%REC	Limits
TCMX	118	66-140
Decachlorobiphenyl	125	51-150

Field ID: QB-08-11@7.0' Diln Fac: 1.000 Type: 135115 Batch#: SAMPLE Lab ID: 201171-032 Prepared: 02/22/08 dry 17% Basis: Analyzed: 02/23/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	122	66-140
Decachlorobiphenyl	130	51-150

ND= Not Detected

RL= Reporting Limit

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1.000 QB-08-03@15.5' Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-033 02/22/08 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	89	66-140
Decachlorobiphenyl	86	51-150

Field ID: QB-08-05@2' Diln Fac: 1.000 Type: 135115 Batch#: SAMPLE Lab ID: 201171-034 Prepared: 02/22/08 Basis: Analyzed: 02/23/08 dry Moisture: 10₺ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	142 *	66-140
Decachlorobiphenyl	133	51-150



QB-08-05@5' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-035 02/22/08 Prepared: Analyzed: Basis: dry 02/26/08 Moisture: 22% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	31	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	190	15	
Aroclor-1260	280	15	

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	125	51-150

Field ID: QB-08-05@7.0' Diln Fac: 1.000 Type: Batch#: 135115 SAMPLE Lab ID: 02/22/08 201171-036 Prepared: Basis: dry Analyzed: 02/26/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	440	14	
Aroclor-1260	610	14	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	105	51-150



QB-08-05@12' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-037 02/22/08 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: 19% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	30	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	Limits
TCMX	134	66-140
Decachlorobiphenyl	140	51-150

Field ID: QB-08-05@13.5' Diln Fac: 1.000 Type: 135115 Batch#: SAMPLE Lab ID: 201171-038 Prepared: 02/22/08 dry 17% Basis: Analyzed: 02/23/08 Moisture: Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	123	66-140
Decachlorobiphenyl	126	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-01@2' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135115 Lāb ID: 201171-039 02/22/08 Prepared: Basis: dry Analyzed: 02/23/08 Moisture: 9% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	137	66-140
Decachlorobiphenyl	139	51-150

Field ID: QB-08-01@6' Diln Fac: 5.000 135115 Type: Batch#: SAMPLE Lab ID: 02/22/08 201171-040 Prepared: Basis: dry Analyzed: 02/26/08 Moisture: $14\frac{1}{8}$ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	48	
Aroclor-1221	ND	96	
Aroclor-1232	ND	48	
Aroclor-1242	ND	48	
Aroclor-1248	ND	48	
Aroclor-1254	2,300	48	
Aroclor-1260	3,300	48	

Surrogate	%REC	Limits
TCMX	111	66-140
Decachlorobiphenyl	122	51-150



QB-08-01@8' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135138 Lāb ID: 201171-041 02/22/08 Prepared: Basis: dry Analyzed: 02/25/08 Moisture: 15% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	320	14	
Aroclor-1260	420	14	

Surrogate	%REC	Limits
TCMX	95	66-140
Decachlorobiphenyl	87	51-150

Field ID: QB-08-01@10' Diln Fac: 1.000 Type: 135138 Batch#: SAMPLE Lab ID: 02/22/08 201171-042 Prepared: 02/25/08 Basis: dry Analyzed: Moisture: 26⁸ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	16	
Aroclor-1221	ND	32	
Aroclor-1232	ND	16	
Aroclor-1242	ND	16	
Aroclor-1248	ND	16	
Aroclor-1254	890	16	
Aroclor-1260	750	16	

Surrogate	%REC	Limits
TCMX	88	66-140
Decachlorobiphenyl	72	51-150



QB-08-01@12' 1.000 Field ID: Diln Fac: 135138 Type: SAMPLE Batch#: Lāb ID: 201171-043 02/22/08 Prepared: Basis: dry Analyzed: 02/25/08 Moisture: 8% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	26	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	19	13	
Aroclor-1260	21	13	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	83	51-150

Field ID: QB-08-03@5.5' Diln Fac: 1.000 Type: 135138 SAMPLE Batch#: Lab ID: 201171-044 02/22/08 Prepared: 02/25/08 Basis: Analyzed: dry Moisture: 11% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	13	
Aroclor-1221	ND	27	
Aroclor-1232	ND	13	
Aroclor-1242	ND	13	
Aroclor-1248	ND	13	
Aroclor-1254	ND	13	
Aroclor-1260	ND	13	

Surrogate	%REC	Limits
TCMX	94	66-140
Decachlorobiphenyl	75	51-150

ND= Not Detected

RL= Reporting Limit



QB-08-03@8' 1.000 Field ID: Diln Fac: Type: SAMPLE Batch#: 135138 Lāb ID: 201171-045 02/22/08 Prepared: Basis: dry Analyzed: 02/25/08 Moisture: 13% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	280	14	
Aroclor-1260	350	14	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	90	51-150

Field ID: QB-08-03@11.5' Diln Fac: 1.000 135138 Type: SAMPLE Batch#: Lab ID: 02/22/08 201171-046 Prepared: 02/25/08 Basis: dry Analyzed: Moisture: $14\frac{1}{8}$ Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	28	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	40	14	
Aroclor-1260	44	14	

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	85	51-150



1.000 QB-08-03@14.5' Field ID: Diln Fac: 135138 Type: SAMPLE Batch#: Lāb ID: 201171-047 02/22/08 Prepared: Basis: dry Analyzed: 02/26/08 Moisture: 33% Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	18	
Aroclor-1221	ND	36	
Aroclor-1232	ND	18	
Aroclor-1242	ND	18	
Aroclor-1248	ND	18	
Aroclor-1254	ND	18	
Aroclor-1260	ND	18	

Surrogate	%REC	Limits
TCMX	103	66-140
Decachlorobiphenyl	100	51-150

Type: BLANK Batch#: 135105
Lab ID: QC429389 Prepared: 02/21/08
Basis: as received Analyzed: 02/22/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	100	66-140
Decachlorobiphenyl	101	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit
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1430 21 01 23



Type: BLANK Batch#: 135115
Lab ID: QC429432 Prepared: 02/22/08
Basis: as received Analyzed: 02/23/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits	
TCMX	123	66-140	
Decachlorobiphenyl	115	51-150	

Type: BLANK Batch#: 135138
Lab ID: QC429532 Prepared: 02/22/08
Basis: as received Analyzed: 02/26/08
Diln Fac: 1.000 Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	128	51-150

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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	Polychlorinated	Biphenyls	(PCBs)
Lab #:	201171	Location: F	Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: E	EPA 3550B
Project#:	STANDARD	Analysis: E	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC429390	Batch#:	135105
Matrix:	Soil	Prepared:	02/21/08
Units:	ug/Kg	Analyzed:	02/22/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	330.9	305.8	92	67-122

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	100	51-150

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 201171		Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: STANDA	ARD	Analysis: EPA 8082
Field ID:	QB-08-11@10'	Batch#: 135105
MSS Lab ID:	201171-006	Sampled: 02/12/08
Matrix:	Soil	Received: 02/13/08
Units:	ug/Kg	Prepared: 02/21/08
Basis:	dry	Analyzed: 02/22/08
Diln Fac:	1.000	

Type: MS Moisture: 11%

Lab ID: QC429391 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<7.664	373.2	364.9	98	67-127

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	106	51-150

Type: MSD Moisture: 11%

Lab ID: QC429392 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	376.9	349.6	93	67-127	5	29

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	97	51-150



	Polychlorinated	Biphenyls (1	PCBs)
Lab #:	201171	Location: Form	ner Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA	3550B
Project#:	STANDARD	Analysis: EPA	8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC429433	Batch#:	135115
Matrix:	Soil	Prepared:	02/22/08
Units:	ug/Kg	Analyzed:	02/23/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	332.1	315.3	95	67-122

Surrogate	%REC	Limits
TCMX	117	66-140
Decachlorobiphenyl	114	51-150

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 201171	-	Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: STANDA	ARD	Analysis: EPA 8082
Field ID:	QB-08-09@8'	Batch#: 135115
MSS Lab ID:	201171-023	Sampled: 02/12/08
Matrix:	Soil	Received: 02/13/08
Units:	ug/Kg	Prepared: 02/22/08
Basis:	dry	Analyzed: 02/26/08
Diln Fac:	5.000	

Type: MS Moisture: 16%

Lab ID: QC429434 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<22.34	395.8	354.2	90	67-127

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	108	51-150

Type: MSD Moisture: 16%

Lab ID: QC429435 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	395.9	389.8	98	67-127	10	29

Surrogate	%REC	Limits
TCMX	109	66-140
Decachlorobiphenyl	126	51-150



	Polychlorinated	Biphenyls (1	PCBs)
Lab #:	201171	Location: Form	mer Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA	3550B
Project#:	STANDARD	Analysis: EPA	8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC429533	Batch#:	135138
Matrix:	Soil	Prepared:	02/22/08
Units:	ug/Kg	Analyzed:	02/25/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	336.6	293.3	87	67-122

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	87	51-150

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	Polychlorinated	Biphenyls (PCBs)
Lab #: 201171		Location: Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep: EPA 3550B
Project#: STANDA	ARD	Analysis: EPA 8082
Field ID:	QB-08-01@12'	Batch#: 135138
MSS Lab ID:	201171-043	Sampled: 02/12/08
Matrix:	Soil	Received: 02/13/08
Units:	ug/Kg	Prepared: 02/22/08
Basis:	dry	Analyzed: 02/26/08
Diln Fac:	1.000	

Type: MS Moisture: 8%

Lab ID: QC429534 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<7.476	361.2	294.4	81	67-127

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	92	51-150

Type: MSD Moisture: 8%

Lab ID: QC429535 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	360.6	292.2	81	67-127	1	29

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	86	51-150



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C Lab #: 201171 Client: Prep: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 Sampled: 02/12/08 02/13/08 WET Leachate Matrix: ug/L Received: Units: 1.000 Diln Fac: Prepared: 02/19/08 Batch#: 134977 Analyzed: 02/21/08

Field ID: QB-08-13@3' Lab ID: 201171-014 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	124	53-128
Decachlorobiphenyl	85	26-120

Field ID: QB-08-08@12' Lab ID: 201171-018
Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	121	53-128
Decachlorobiphenvl	71	26-120

Type: BLANK Cleanup Method: EPA 3665A Lab ID: QC428885

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surroga	%REC	REC
CMX	89	
ecachlorobipheny	67	

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)	
Lab #:	201171	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: EPA 3520C	
Project#:	STANDARD	Analysis: EPA 8082	
Matrix:	WET Leachate	Batch#: 134977	
Units:	ug/L	Prepared: 02/19/08	
Diln Fac:	1.000	Analyzed: 02/21/08	

Type: BS Cleanup Method: EPA 3665A

Lab ID: BS QC428886

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	7.093	71	61-123

Surrogate	%REC	Limits
TCMX	87	53-128
Decachlorobiphenyl	75	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428887

Anal	yte Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	6.149	61	61-123	14	23

Surrogate	%REC	Limits
TCMX	94	53-128
Decachlorobiphenyl	81	26-120



Lab #: 201171
Client: Questa Engineering Corporation
Project#: STANDARD
Analyte: Moisture, Percent
Matrix: Soil
Units: %
Diln Fac: 1.000

Moisture

Location: Former Larkspur Treatment Plant
Prep: METHOD
Analysis: ASTM D2216/CLP
Sampled: 02/12/08
Received: 02/13/08
Analyzed: 02/19/08

Field ID	Lab ID	Result	RL	Batch#	
OB-08-14@2'	201171-001	12	1	134986	-
QB-08-14@5'	201171-002	12	1	134986	
ÕB-08-14@8'	201171-003	14	1	134986	
OB-08-14@11'	201171-004	$\overline{11}$		134986	
QB-08-14@13'	201171-005	20	1	134986	
OB-08-11@10'	201171-006	11	1 1 1 1	134986	
OB-08-12@1'	201171-000	$\overset{1}{14}$	1	134986	
OB-08-12@1.5'	201171-007	13	1	134986	
OB-08-12@5:5	201171-008	21	1	134986	
			1 1 1 1		
QB-08-12@6.5'	201171-010	19	1	134986	
QB-08-12@11'	201171-011	22	1	134986	
QB-08-12@13'	201171-012	15	1	134986	
QB-08-13@2'	201171-013	12	1 1	134986	
QB-08-13@3'	201171-014	6	1	134986	
QB-08-08@3'	201171-015	15	1 1	134986	
QB-08-08@5.5'	201171-016	13	1	134986	
QB-08-08@8'	201171-017	12	1	134986	
QB-08-08@12'	201171-018	13	1	134986	
OB-08-08@14'	201171-019	15	1	134986	
ÕB-08-08@14.5'	201171-020	16	1	134986	
OB-08-09@3.5'	201171-021	$\overline{14}$	<u></u>	134987	
QB-08-09@7.5'	201171-022	11	1 1	134987	
OB-08-09@8'	201171-023	16	ī	134987	
OB-08-10@4.5'	201171-024	10	1 1 1 1	134987	
OB-08-10@7.5'	201171-021	13	1	134987	
OB-08-10@9'	201171-025	12	1	134987	
OB-08-10@11.5'	201171-027	22	1	134987	
OB-08-10@11.3	201171-027	16	1 1 1 1 1 1	134987	
~	201171-028	10	1	134987	
QB-08-11@2'	201171-029	16	1		
QB-08-11@4'			1	134987	
QB-08-11@5.5'	201171-031	13	1	134987	
QB-08-11@7.0'	201171-032	17	1	134987	
QB-08-03@15.5'	201171-033	6	1	134987	
QB-08-05@2'	201171-034	10	1	134987	
QB-08-05@5'	201171-035	22	1	134987	
QB-08-05@7.0'	201171-036	13	1	134987	
QB-08-05@12'	201171-037	19	1	134987	
QB-08-05@13.5'	201171-038	17	1	134987	
QB-08-01@2'	201171-039	9	1	134987	
QB-08-01@6'	201171-040	14	1	134987	
QB-08-01@8'	201171-041	15	1	134988	
QB-08-01@10'	201171-042	26	1 1	134988	
OB-08-01@12'	201171-043	8	_ 1	134988	
OB-08-03@5.5'	201171-044	11	_ 1	134988	
OB-08-03@8'	201171-045	13	1 1	134988	
OB-08-03@11.5'	201171-015	14	ī	134988	
QB-08-03@11.5'	201171-040	33	1	134988	
ΔD-00-03@I#'3	7011/1-04/	33		エンマブロロ	



	М	oisture
Lab #:	201171	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: METHOD
Project#:	STANDARD	Analysis: ASTM D2216/CLP
Analyte:	Moisture, Percent	Diln Fac: 1.000
Type:	SDUP	Sampled: 02/12/08
Matrix:	Soil	Received: 02/13/08
Units:	%	Analyzed: 02/19/08

Field ID	MSS Lab ID Lab ID	MSS Result	Result	RL	RPD	Lim	Batch#
QB-08-08@14.5'	201171-020 QC428933	15.97	16.38	1.000	3	15	134986
QB-08-09@3.5'	201171-021 QC428934	14.20	12.27	1.000	15	15	134987
QTP-08-28@6.0'	201174-008 QC428935	17.55	16.91	1.000	4	15	134988



CASE NARRATIVE

Laboratory number: 201174

Client: Questa Engineering Corporation
Location: Former Larkspur Treatment Plant

Request Date: 02/13/08 Samples Received: 02/13/08

This hardcopy data package contains sample and QC results for eight soil samples, requested for the above referenced project on 02/13/08. The samples were received cold and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082) WET Leachate:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201174 Client: Prep: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 02/13/08 02/22/08 Received: Matrix: Soil ug/Kg Units: Prepared: 02/26/08 Batch#: 135138 Analyzed: Sampled: 02/12/08

Field ID: QTP-08-27@1.0' Moisture: 8% Type: SAMPLE Diln Fac: 1.000 Lab ID: 201174-002 Cleanup Method: EPA 3665A

Basis: dry

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	ND	13

Surrogate	%REC	Limits
TCMX	116	66-140
Decachlorobiphenyl	102	51-150

Field ID: QTP-08-27@3.5' Moisture: 16% Type: SAMPLE Diln Fac: 1.000 Cleanup Method: EPA 3665A

Basis: dry

27	n 11	7.	
Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	104	66-140
Decachlorobiphenyl	91	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Received: 0 Project#: STANDARD Matrix: Soil 02/13/08 02/22/08 Units: ug/Kg Prepared: Batch#: 135138 Analyzed: 02/26/08 Sampled: 02/12/08

Field ID: QTP-08-27@5' Moisture: 17%
Type: SAMPLE Diln Fac: 1.000
Lab ID: 201174-004 Cleanup Method: EPA 3665A

Basis: dry

Analyte	Result	RL	
Aroclor-1016	ND	14	
Aroclor-1221	ND	29	
Aroclor-1232	ND	14	
Aroclor-1242	ND	14	
Aroclor-1248	ND	14	
Aroclor-1254	ND	14	
Aroclor-1260	ND	14	

Surrogate	%REC	Limits
TCMX	114	66-140
Decachlorobiphenyl	107	51-150

Field ID: QTP-08-28@2.5' Moisture: 7%
Type: SAMPLE Diln Fac: 1.000
Lab ID: 201174-006 Cleanup Method: EPA 3665A

Basis: dry

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	200	13
Aroclor-1260	350	13

Surrogate	%REC	Limits
TCMX	110	66-140
Decachlorobiphenyl	100	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201174 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation Prep: EPA 3550B Analysis: EPA 8082 Received: 0 Project#: STANDARD Matrix: Soil 02/13/08 02/22/08 Units: ug/Kg Prepared: Batch#: 135138 Analyzed: 02/26/08 Sampled: 02/12/08

Field ID: QTP-08-28@4.5' Moisture: 18% Type: SAMPLE Diln Fac: 10.00 Lab ID: 201174-007 Cleanup Method: EPA 3665A

Basis: dry

Analyte	Result	RL	
Aroclor-1016	ND	100	
Aroclor-1221	ND	200	
Aroclor-1232	ND	100	
Aroclor-1242	ND	100	
Aroclor-1248	ND	100	
Aroclor-1254	2,900	100	
Aroclor-1260	3,700	100	

Surrogate	%REC	Limits
TCMX	DO	66-140
Decachlorobiphenyl	DO	51-150

Field ID: QTP-08-28@6.0' Moisture: 18% Type: SAMPLE Diln Fac: 1.000 Lab ID: 201174-008 Cleanup Method: EPA 3665A

Basis: dry

Analyte	Result	RL	
Aroclor-1016	ND	15	
Aroclor-1221	ND	29	
Aroclor-1232	ND	15	
Aroclor-1242	ND	15	
Aroclor-1248	ND	15	
Aroclor-1254	ND	15	
Aroclor-1260	ND	15	

Surrogate	%REC	Limits
TCMX	107	66-140
Decachlorobiphenyl	103	51-150

DO= Diluted Out ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3550B Lab #: 201174 Client: Questa Engineering Corporation Analysis: EPA 8082 Received: 0 Project#: STANDARD Matrix: Soil 02/13/08 ug/Kg 135138 Prepared: 02/22/08 Units: Batch#: Analyzed: 02/26/08 02/12/08 Sampled:

Type: BLANK Diln Fac: 1.000 Lab ID: QC429532 Cleanup Method: EPA 3665A

Basis: as received

Analyte	Result	RL	
Aroclor-1016	ND	12	
Aroclor-1221	ND	24	
Aroclor-1232	ND	12	
Aroclor-1242	ND	12	
Aroclor-1248	ND	12	
Aroclor-1254	ND	12	
Aroclor-1260	ND	12	

Surrogate	%REC	Limits
TCMX	108	66-140
Decachlorobiphenyl	128	51-150

4.1



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201174	Location: Form	er Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA	3550B
Project#:	STANDARD	Analysis: EPA	8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC429533	Batch#:	135138
Matrix:	Soil	Prepared:	02/22/08
Units:	ug/Kg	Analyzed:	02/25/08
Basis:	as received		

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	336.6	293.3	87	67-122

Surrogate	%REC	Limits
TCMX	99	66-140
Decachlorobiphenyl	87	51-150

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	Polychlorinated	Biphenyl	s (PCBs)
Lab #: 201174	:	Location:	Former Larkspur Treatment Plant
Client: Questa	Engineering Corporation	Prep:	EPA 3550B
Project#: STANDA	ARD	Analysis:	EPA 8082
Field ID:	QB-08-01@12'	Batch#:	135138
MSS Lab ID:	201171-043	Sampled:	02/12/08
Matrix:	Soil	Received:	02/13/08
Units:	ug/Kg	Prepared:	02/22/08
Basis:	dry	Analyzed:	02/26/08
Diln Fac:	1.000		

Type: MS Moisture: 8%

Lab ID: QC429534 Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1221	<7.476	361.2	294.4	81	67-127

Surrogate	%REC	Limits
TCMX	98	66-140
Decachlorobiphenyl	92	51-150

Type: MSD Moisture: 8%

Lab ID: QC429535 Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	360.6	292.2	81	67-127	1	29

Surrogate	%REC	Limits
TCMX	97	66-140
Decachlorobiphenyl	86	51-150



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C Lab #: 201174 Client: Prep: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 Sampled: 02/12/08 02/13/08 WET Leachate Matrix: ug/L Received: Units: 1.000 Diln Fac: Prepared: 02/19/08 Batch#: 134977 Analyzed: 02/21/08

Field ID: QTP-08-06@0.5' Lab ID: 201174-001 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	102	53-128
Decachlorobiphenyl	32	26-120

Field ID: QTP-08-13@3' Lab ID: 201174-005 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	102	53-128
Decachlorobiphenvl	58	26-120

Type: BLANK Cleanup Method: EPA 3665A Lab ID: QC428885

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits	
TCMX	89	53-128	
Decachlorobiphenyl	67	26-120	

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls (PCBs)	
Lab #:	201174	Location: Former Larkspur Treatment Plants	ant
Client:	Questa Engineering Corporation	Prep: EPA 3520C	
Project#:	STANDARD	Analysis: EPA 8082	
Matrix:	WET Leachate	Batch#: 134977	
Units:	ug/L	Prepared: 02/19/08	
Diln Fac:	1.000	Analyzed: 02/21/08	

Type: BS Cleanup Method: EPA 3665A

Lab ID: BS QC428886

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	7.093	71	61-123

Surrogate	%REC	Limits
TCMX	87	53-128
Decachlorobiphenyl	75	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428887

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	6.149	61	61-123	14	23

Surrogate	%REC	Limits
TCMX	94	53-128
Decachlorobiphenyl	81	26-120



		Moisture	
Lab #:	201174	Location: Former Larkspur Treatment Plant	
Client:	Questa Engineering Corporation	Prep: METHOD	
Project#:	STANDARD	Analysis: ASTM D2216/CLP	
Analyte:	Moisture, Percent	Batch#: 134988	
Matrix:	Soil	Sampled: 02/12/08	
Units:	%	Received: 02/13/08	
Diln Fac:	1.000	Analyzed: 02/19/08	

Field ID	Lab ID	Result	RL	
QTP-08-06@0.5'	201174-001	15	1	
QTP-08-27@1.0'	201174-002	8	1	
QTP-08-27@3.5'	201174-003	16	1	
QTP-08-27@5'	201174-004	17	1	
QTP-08-13@3'	201174-005	12	1	
QTP-08-28@2.5'	201174-006	7	1	
QTP-08-28@4.5'	201174-007	18	1	
QTP-08-28@6.0'	201174-008	18	1	

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Moisture						
Lab #: 2011	174	Location: Form	mer Larkspur Treatment Plant			
Client: Ques	sta Engineering Corporation	Prep: METI	HOD			
Project#: STAN	IDARD	Analysis: ASTI	M D2216/CLP			
Analyte:	Moisture, Percent	Units:	%			
Field ID:	QTP-08-28@6.0'	Diln Fac:	1.000			
Type:	SDUP	Batch#:	134988			
MSS Lab ID:	201174-008	Sampled:	02/12/08			
Lab ID:	QC428935	Received:	02/13/08			
Matrix:	Soil	Analyzed:	02/19/08			

MSS Result	Result	RL	RPD	Lim	
17.55	16.91	1.000	4	15	



CASE NARRATIVE

Laboratory number: 201175

Client: Questa Engineering Corporation
Location: Former Larkspur Treatment Plant

Request Date: 02/13/08 Samples Received: 02/13/08

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 02/13/08. The samples were received on ice and intact.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Low recovery was observed for Aroclor-1221 in the LCS for batch 134940. This indicates that the filtering samples can remove target analytes. These samples were filtered per the clients request. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No other analytical problems were encountered.



Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C Lab #: 201175 Client: Prep: Questa Engineering Corporation Project#: STANDARD Analysis: EPA 8082 Sampled: 02/12/08 02/13/08 Water Matrix: ug/L Received: Units: Diln Fac: 1.000 Prepared: 02/16/08 02/19/08 Batch#: 134940 Analyzed:

Field ID: QB-08-01 GW Lab ID: 201175-001 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	75	53-128
Decachlorobiphenyl	91	26-120

Field ID: QB-08-05 GW Lab ID: 201175-002 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	83	53-128
Decachlorobiphenvl	82	26-120

Field ID: QB-08-08 GW Lab ID: 201175-003 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	83	53-128
Decachlorobiphenyl	110	26-120

ND= Not Detected RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs) Lab #: 201175 Location: Former Larkspur Treatment Plant Client: Questa Engineering Corporation EPA 3520C Prep: Analysis: EPA 8082 Sampled: 0 Project#: STANDARD Matrix: Water 02/12/08 Units: ug/L Received: 02/13/08 1.000 Diln Fac: Prepared: 02/16/08 Batch#: 134940 Analyzed: 02/19/08

Field ID: QB-08-10 GW Lab ID: 201175-004 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Field ID: QB-08-12 GW Lab ID: 201175-005 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	80	53-128
Decachlorobiphenyl	113	26-120

Field ID: QB-08-14 GW Lab ID: 201175-006 Type: SAMPLE Cleanup Method: EPA 3665A

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Sı	urrogate	%REC	Limits
TCMX	-	105	53-128
Decachlorob	piphenvl	60	26-120

ND= Not Detected RL= Reporting Limit

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	Polychlorinated	Biphenyls	(PCBs)	
Lab #: Client: Project#:	201175 Questa Engineering Corporation STANDARD		Former Larkspur 1 EPA 3520C EPA 8082	Treatment Plant
Matrix:	Water	Sampled:	02/12/08	
Units:	ug/L	Received:	02/13/08	
Diln Fac:	1.000	Prepared:	02/16/08	
Batch#:	134940	Analyzed:	02/19/08	

Cleanup Method: EPA 3665A

Type: Lab ID: BLANK QC428746

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	94	53-128
Decachlorobiphenyl	60	26-120



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201175	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Matrix:	Water	Batch#: 134940
Units:	ug/L	Prepared: 02/16/08
Diln Fac:	1.000	Analyzed: 02/20/08

Type: BS Cleanup Method: EPA 3665A

Type: BS Lab ID: QC428747

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.266	83	61-123

Surrogate	%REC	Limits
TCMX	110	53-128
Decachlorobiphenyl	40	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428748

Anal	lyte Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	7.866	79	61-123	5	23

Surrogate	%REC	Limits
TCMX	99	53-128
Decachlorobiphenyl	75	26-120



	Polychlorinated	Biphenyls (PCBs)
Lab #:	201175	Location: Former Larkspur Treatment Plant
Client:	Questa Engineering Corporation	Prep: EPA 3520C
Project#:	STANDARD	Analysis: EPA 8082
Type:	LCS	Diln Fac: 1.000
Lab ID:	QC428750	Batch#: 134940
Matrix:	Filter	Prepared: 02/16/08
Units:	ug/Kg	Analyzed: 02/20/08

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.53	3.174	30 *	61-123

Surrogate	%REC	Limits
TCMX	97	53-128
Decachlorobiphenyl	50	26-120

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Dissolved Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C Lab #: 201175 Client: Questa Engineering Corporation Prep: Analysis: EPA 8082 Project#: STANDARD 02/13/08 02/16/08 Received: Units: ug/L 1.000 Diln Fac: Prepared: Batch#: 134940 Analyzed: 02/19/08 Sampled: 02/12/08

Field ID: QB-08-01 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-001

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	75	53-128
Decachlorobiphenyl	91	26-120

Field ID: QB-08-05 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-002

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

	Surrogate	%REC	Limits
ГСМХ	20110300	83	53-128
	orobiphenyl	82	26-120

Field ID: QB-08-08 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-003

Lab ID: 201175-003

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	83	53-128
Decachlorobiphenyl	110	26-120

ND= Not Detected RL= Reporting Limit

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Dissolved Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C
Analysis: EPA 8082
Received: 02/13/08 Lab #: Client: Questa Engineering Corporation Project#: STANDARD ug/L Units: 1.000 Diln Fac: Prepared: 02/16/08 Batch#: 134940 Analyzed: 02/19/08 02/12/08 Sampled:

Field ID: QB-08-10 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-004

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	85	53-128
Decachlorobiphenyl	109	26-120

Field ID: QB-08-12 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-005

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	80	53-128
Decachlorobiphenyl	113	26-120

Field ID: QB-08-14 GW Matrix: Filtrate
Type: SAMPLE Cleanup Method: EPA 3665A
Lab ID: 201175-006

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Limits
TCMX	105	53-128
Decachlorobiphenyl	60	26-120

ND= Not Detected RL= Reporting Limit

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Dissolved Polychlorinated Biphenyls (PCBs) Location: Former Larkspur Treatment Plant Prep: EPA 3520C Lab #: Client: Questa Engineering Corporation Project#: STANDARD
Units: ug Analysis: EPA 8082 Received: 0 ug/L 02/13/08 Diln Fac: 1.000 Prepared: 02/16/08 Batch#: 134940 Analyzed: 02/19/08 02/12/08 Sampled:

Type: BLANK Matrix: Water QC428746 Cleanup Method: EPA 3665A Lab ID:

Analyte	Result	RL	
Aroclor-1016	ND	0.50	
Aroclor-1221	ND	1.0	
Aroclor-1232	ND	0.50	
Aroclor-1242	ND	0.50	
Aroclor-1248	ND	0.50	
Aroclor-1254	ND	0.50	
Aroclor-1260	ND	0.50	

Surrogate	%REC	Surrogate	Limits
	O A		F2 120
XIV	94	'IX	53-128
Decachlorobiphenyl	60	Decachlorobiphenyl	26-120

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Dissolved Polychlorinated Biphenyls (PCBs)							
Lab #:	201175	Location: Former Larkspur Treatment Plant					
Client:	Questa Engineering Corporation	Prep: EPA 3520C					
Project#:	STANDARD	Analysis: EPA 8082					
Matrix:	Water	Batch#: 134940					
Units:	ug/L	Prepared: 02/16/08					
Diln Fac:	1.000	Analyzed: 02/20/08					

Type: BS Cleanup Method: EPA 3665A

Type: BS Lab ID: QC428747

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.00	8.266	83	61-123

Surrogate	%REC	Limits
TCMX	110	53-128
Decachlorobiphenyl	40	26-120

Type: BSD Cleanup Method: EPA 3665A

Lab ID: QC428748

Anal	lyte Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1221	10.00	7.866	79	61-123	5	23

Surrogate	%REC	Limits
TCMX	99	53-128
Decachlorobiphenyl	75	26-120

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Dissolved Polychlorinated Biphenyls (PCBs)						
Lab #:	201175	Location: Former Larkspur Treatment Plant				
Client:	Questa Engineering Corporation	Prep: EPA 3520C				
Project#:	STANDARD	Analysis: EPA 8082				
Type:	LCS	Diln Fac: 1.000				
Lab ID:	QC428750	Batch#: 134940				
Matrix:	Filtrate	Prepared: 02/16/08				
Units:	ug/L	Analyzed: 02/20/08				

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1221	10.53	3.174	30 *	61-123

Surrogate	%REC	Limits
TCMX	97	53-128
Decachlorobiphenyl	50	26-120

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95-percent Upper Confidence Limit Calculations

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File WorkSheet_a.wst

Full Precision OFF
Confidence Coefficient 95%
Number of Bootstrap Operations 2000

PCBs

	General Stati	istics	
Number of Valid Data	333	Number of Detected Data	196
Number of Distinct Detected Data	158	Number of Non-Detect Data	137
		Percent Non-Detects	41.14%
Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.01	Minimum Detected	-4.605
Maximum Detected	53	Maximum Detected	3.97
Mean of Detected	1.565	Mean of Detected	-1.056
SD of Detected	5.38	SD of Detected	1.695
Minimum Non-Detect	0.014	Minimum Non-Detect	-4.269
Maximum Non-Detect	0.014	Maximum Non-Detect	-4.269
	UCL Statist	ire	
Normal Distribution Test with Detected Values Only	002 0101101	Lognormal Distribution Test with Detected Values Onl	lv
Lilliefors Test Statistic	0.386	Lilliefors Test Statistic	0.0445
5% Lilliefors Critical Value	0.0633	5% Lilliefors Critical Value	0.0633
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.924	Mean	-2.663
SD	4.194	SD	2.322
95% DL/2 (t) UCL	1.303	95% H-Stat (DL/2) UCL	0.848
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-2.676
, ,		SD in Log Scale	2.5
		Mean in Original Scale	0.926
		SD in Original Scale	4.193
		95% Percentile Bootstrap UCL	1.329
		95% BCA Bootstrap UCL	1.449
Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only	
k star (bias corrected)	0.429	Data appear Lognormal at 5% Significance Level	
Theta Star	3.647		
nu star	168.2		
A-D Test Statistic	7.694	Nonparametric Statistics	
5% A-D Critical Value	0.837	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.837	Mean	0.926
5% K-S Critical Value	0.069	SD	4.187
Data not Gamma Distributed at 5% Significance Leve	əl	SE of Mean	0.23
		95% KM (t) UCL	1.305
Assuming Gamma Distribution		95% KM (z) UCL	1.304
Gamma ROS Statistics using Extrapolated Data	1E-09	95% KM (jackknife) UCL	1.305
Minimum		95% KM (bootstrap t) UCL	1.799
Maximum Mean	53 1.153	95% KM (BCA) UCL 95% KM (Percentile Bootstrap) UCL	1.362 1.342
Median	0.21	95% KM (Chebyshev) UCL	1.928
SD	4.189	97.5% KM (Chebyshev) UCL	2.362
k star	0.138	99% KM (Chebyshev) UCL	3.215
Theta star	8.381	00% ((0.100)0.104) 002	2.0
Nu star	91.65	Potential UCLs to Use	
AppChi2	70.57	97.5% KM (Chebyshev) UCL	2.362
95% Gamma Approximate UCL	1.498	(2.1.0)	
95% Adjusted Gamma UCL	1.499		

Note: DL/2 is not a recommended method.

	General UCL Statistics	for Full Data Se	ts	
User Selected Options				
From File	WorkSheet.wst			
Full Precision	OFF			
Confidence Coefficient	95%			
Number of Bootstrap Operations				2000
PCBs				
General Statistics				
Number of Valid Observations		131	Number of Distinct Observations	77
Raw Statistics			Log-transformed Statistics	
Minimum			Minimum of Log Data	-4.605
Maximum			Maximum of Log Data	3.109
Mean			Mean of log Data	-2.379
Geometric Mean			SD of log Data	2.011
Median		0.067		
SD		2.196		
Std. Error of Mean		0.192		
Coefficient of Variation		3.11		
Skewness		7.818		
Relevant UCL Statistics				
Normal Distribution Test			Lognormal Distribution Test	
Lilliefors Test Statistic			Lilliefors Test Statistic	0.231
Lilliefors Critical Value		0.0774	Lilliefors Critical Value	0.0774
Data not Normal at 5% Significan	ce Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution			Assuming Lognormal Distribution	
95% Student's-t UCL		1.024	95% H-UCL	1.247
95% UCLs (Adjusted for Skewn	iess)		95% Chebyshev (MVUE) UCL	1.495
95% Adjusted-CLT UCL (Chen-	-1995)	1.162	97.5% Chebyshev (MVUE) UCL	1.852
95% Modified-t UCL (Johnson-	1978)	1.046	99% Chebyshev (MVUE) UCL	2.555
Gamma Distribution Test			Data Distribution	
k star (bias corrected)		0.331	Data do not follow a Discernable Distribution (0.05)	
Theta Star		2.133		
MLE of Mean		0.706		
MLE of Standard Deviation		1.227		
nu star		86.75		
Approximate Chi Square Value (.	05)		Nonparametric Statistics	
Adjusted Level of Significance		0.0482		1.022
Adjusted Chi Square Value		66.08		1.024
A 1		40	95% Standard Bootstrap UCL	1.016
Anderson-Darling Test Statistic			95% Bootstrap-t UCL	1.387
Anderson-Darling 5% Critical Val	ue	0.86	95% Hall's Bootstrap UCL	2.293

Potential UCL to Use Use 95% Chebyshev (Mean, Sd) UCL 1.543

0.924 0.927

0.198 95% Percentile Bootstrap UCL

95% Chebyshev(Mean, Sd) UCL

99% Chebyshev(Mean, Sd) UCL

97.5% Chebyshev(Mean, Sd) UCL

0.088 95% BCA Bootstrap UCL

1.061

1.191

1.543

1.905

2.616

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and laci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.

Kolmogorov-Smirnov Test Statistic

Assuming Gamma Distribution

Kolmogorov-Smirnov 5% Critical Value

Data not Gamma Distributed at 5% Significance Level

95% Approximate Gamma UCL (Use when n >= 40)

95% Adjusted Gamma UCL (Use when n < 40)